

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

U. S. DEPARTMENT OF AGRICULTURE.

LIST OF WORKERS IN
SUBJECTS PERTAINING TO AGRICULTURE
AND HOME ECONOMICS.

PART 1. United States Department of Agriculture.

Prepared in the Division of Publications,
JOS A. ARNOLD, Chief.

PART 2. State Agricultural Colleges and Experiment Stations.

Prepared in the States Relations Service,
A. C. TRUE, Director.

1917-1918.



WASHINGTON
GOVERNMENT PRINTING OFFICE
1918

U. S. DEPARTMENT OF AGRICULTURE.

LIST OF WORKERS IN
SUBJECTS PERTAINING TO AGRICULTURE
AND HOME ECONOMICS.

PART 1. United States Department of Agriculture.

Prepared in the Division of Publications,
JOS A. ARNOLD, Chief.

PART 2. State Agricultural Colleges and Experiment Stations.

Prepared in the States Relations Service,
A. C. TRUE, Director.

1917-1918.



WASHINGTON:
GOVERNMENT PRINTING OFFICE.

1918.

PART 1.

UNITED STATES DEPARTMENT OF
AGRICULTURE.

Prepared by the Division of Publications,
JOS. A. ARNOLD, *Chief*.

LIST OF WORKERS IN SUBJECTS PERTAINING TO AGRICULTURE AND HOME ECONOMICS.

UNITED STATES DEPARTMENT OF AGRICULTURE.

(Prepared in the Division of Publications, JOSEPH A. ARNOLD, *Chief*.)

OFFICE OF THE SECRETARY.

Secretary of Agriculture, DAVID F. HOUSTON.

The Secretary of Agriculture is charged with the work of promoting agriculture in its broadest sense. He exercises general supervision and control over the affairs of the department and formulates and establishes the general policies to be pursued by its various branches and offices.

Assistant Secretary of Agriculture, CARL VROOMAN.

Assistant Secretary of Agriculture, R. A. PEARSON.¹

Assistant Secretary of Agriculture, CLARENCE OUSLEY.¹

Assistant to the Secretary, ALONZO E. TAYLOR.

Dr. Taylor is the representative of the Secretary of Agriculture on the War Trade Board.

Assistant to the Secretary, G. I. CHRISTIE.

Mr. Christie, under the immediate supervision of Assistant Secretary Ousley, will direct the activities of the Department in connection with the farm-labor problem.

Assistant to the Secretary, WILLIAM WALLACE MEIN.

Mr. Mein is the immediate representative of the Secretary of Agriculture in the discharge of the duties imposed upon him by the President's proclamation of February 25, 1918, with reference to licensing the importation, manufacture, storage, and distribution of fertilizers and fertilizer materials.

Assistant to the Secretary, FLOYD R. HARRISON.

Chief Clerk, ROBERT M. REESE.

The Chief Clerk has general supervision of clerks and employees; of the order of business of the department and of records of the Secretary's office; and of expenditures from appropriations for miscellaneous expenses, rents, etc. He is responsible for the enforcement of the general regulations of the department and is custodian of buildings.

Office of the Solicitor, W. M. WILLIAMS, *Solicitor*; Chief Clerk, E. S. FRENCH.

The Solicitor is the legal adviser of the secretary and the heads of the several branches of the department. He directs and supervises all law work of the department.

Administrative and Game Laws Section. R. W. WILLIAMS, *Assistant to the Solicitor, in charge.*

This section attends to the administration of the general affairs of the office not specifically included in other sections; also prepares reports of violations, briefs, and memoranda, aids in drafting regulations, and assists in the trial of cases under the Lacey Act, migratory bird law, Alaska game law, and protection of bird reserves law.

National Forests, Plant Quarantine, and Federal Aid Road Act Section. FRED LEES, *Assistant to the Solicitor, in charge.*

This section does the law work arising from business of the Forest Service, including contests of claims to lands in the national forests under homestead, mineral, and other laws, cases arising out of timber, fire, fencing, and other trespasses on the national forests, opinions to the Forester and review of opinions presented to the district foresters by assistants to the Solicitor in the field, and various other legal matters connected with the national forests, such as drafting of contracts, regulations, and forms, correspondence with the Attorney General and Secretary of the Interior, and miscellaneous correspondence; prepares reports of violations, briefs, and memoranda, aids in drafting regula-

¹ These positions were created for the period of the war.

tions, and assists in the trial of cases under the plant quarantine law; also handles legal questions and aids in drafting regulations, forms, and agreements under the Federal Aid Road Act.

Meat Inspection, Animal Quarantine Laws, Patent, and Contract Section. C. W. BOYLE, *Assistant to the Solicitor, in charge.*

This section prepares reports of violations, briefs, and memoranda, aids in drafting regulations, and assists in the trial of cases under the meat-inspection, animal quarantine, 28-hour, other animal transportation and virus laws, and drafts informations and indictments in the quarantine and virus cases; also draws bonds, contracts, leases, and other agreements, and prosecutes applications of department employees for patents.

Food and Drugs and Seed Importation Laws Section. P. D. CRONIN, *Assistant to the Solicitor, in charge.*

In connection with the Federal Food and Drugs Act, this section prepares recommendations to United States attorneys for seizures, drafts informations and indictments in criminal cases, assists in the trial of important or technical cases, both civil and criminal, prepares notices of judgments, and aids in the conduct of public hearings and in drawing regulations, food-inspection decisions, and other rulings; also prepares reports of violations, briefs, and memoranda, aids in drafting regulations, and assists in the trial of cases under the Seed Importation Act.

Insecticide and Fungicide Law Section. O. H. GATES, *Assistant to the Solicitor, in charge.*

In connection with the Federal Insecticide Act, this section prepares recommendations to United States attorneys for seizures, drafts information and indictments in criminal cases, assists in the trial of important or technical cases, both civil and criminal, prepares notices of judgments, and aids in drawing regulations, insecticide decisions, and other rulings; also compiles, and revises from time to time, the "Laws Applicable to the United States Department of Agriculture," and handles claims for balances due estates of deceased employees.

Marketing and Rural Organization Section. E. B. QUIGGLE, *Assistant to the Solicitor, in charge.*

This section handles law work in connection with the United States cotton futures act, the United States grain standards act, and the United States warehouse act; advises the Office of Markets and Rural Organization regarding the legality of various types of cooperative organizations, and concerning legal problems relative to the marketing and distribution of farm products and rural credits; conducts general correspondence and compiles laws relating to these subjects; also handles miscellaneous legal questions.

Acquisition of Lands Section. A. H. MCCONVILLE, *Assistant to the Solicitor, in charge.*

In connection with the acquisition of lands under the Weeks forestry law (act of Mar. 1, 1911), this section prepares agreements of purchase, supervises and directs the work of title attorneys engaged in the examination of titles, assists United States attorneys in the conduct of condemnation proceedings, and handles correspondence with the Attorney General.

Assistants to the Solicitor, Stationed in the Field.

Branches of the Office of the Solicitor are located at Missoula, Mont., in charge of D. F. McGowan; Denver, Colo., in charge of R. F. Feagans; Albuquerque, N. Mex., in charge of M. M. Cheney, acting assistant; Ogden, Utah, in charge of J. F. Lawson; San Francisco, Cal., in charge of H. P. Dechant; and Portland, Oreg., in charge of W. F. Staley. These officers are legal advisers to the district foresters and handle the law work of the Forest Service in the field, besides such local legal work of the department as may be assigned by the Solicitor.

Office of Farm Management. W. J. SPILLMAN, *Chief*; E. H. THOMSON, *Assistant Chief*; LISLE MORRISON, *Assistant to the Chief.*

[Those whose names are starred (*) are on furlough for military service.]

This office studies the details of farm practice. Its main object is to improve farm practice by introducing better business methods and by applying the principles of science wherever they are known. The types of farming prevailing in the various sections of the country are being studied in a number of localities, and a detailed study of farm economics and business principles is being made.

Scientific staff.—J. H. Arnold, O. E. Baker, C. M. Bennett, G. A. Billings, E. A. Boeger, D. A. Brodie, Junius S. Cates, Levi Chubbuck, R. W. Clothier, J. S. Cotton, M. A. Crosby, J. A. Drake, C. L. Goodrich, Byron Hunter, S. O. Jayne, J. M. Johnson, H. B. McClure, A. D. McNair, H. A. Miller, L. A. Moorhouse, A. G. Smith, Rex E. Willard, and E. O. Wooton, agriculturists; F. H. Branch, L. G. Connor,* A. J. Dadisman, H. M. Dixon, Earl S. Haskell, C. E. Hoke, G. H. Miller, M. B. Oates, F. D. Stevens, and

Arnold P. Yerkes, assistant agriculturists; H. H. Clark, W. C. Funk, H. W. Hawthorne, C. E. Hope, R. D. Jennings,* Oscar A. Juve, Frank Montgomery, J. M. Perdon, jr., John C. Rundles, C. F. Sarle, Earl D. Strait, H. R. Tolley, and H. A. Turner, scientific assistants; J. S. Ball, Lillian Church, M. R. Cooper, H. G. Strait, and Raymond S. Washburn, assistants in farm-cost accounting; E. A. Goldenweiser, statistical expert; H. H. Mowry, assistant in dry-land agriculture; C. L. Holmes and Oscar C. Stine, assistant in farm economics; Raymond Evans, editor in farm management; Francis Joseph Marschner, cartographer; F. W. Peck, agent.

Publication Activities. The functions of the Editorial Division, the Office of Information, and the Division of Publications are given on page 34.

Office of Inspection. ALEX. MCC. ASHLEY, *in charge*.

Handles personnel matters; is charged with the accounting and administrative examination of claims and the preparation of financial reports involving appropriations under the Office of the Secretary; and assists in the fiscal operation of the bureaus.

Forest Appeals. THOMAS G. SHEARMAN, *in charge*.

This officer investigates for the Secretary of Agriculture appeals from decisions of the Forest Service, and reports his findings to the Secretary.

Appointment Clerk, IRVING W. PEW.

The Appointment Clerk prepares all papers connected with appointments, transfers, promotions, reductions, details, furloughs, and removals, and has charge of correspondence with the Civil Service Commission. He is the custodian of oaths of office and personnel reports. He has the custody and use of the department seal.

Office of Exhibits. F. LAMSON-SCRIBNER, *Special Agent on Exhibits*.

The Office of Exhibits handles the correspondence of the department relative to exhibits at fairs and expositions of various kinds; cooperates with the several branches of the department in preparing exposition material; ships, installs, and cares for such exhibits; and investigates methods of displaying them.

WEATHER BUREAU.

Chief CHARLES F. MARVIN; *Assistant Chief*, C. C. CLARK; *Chief Clerk*, EDGAR B. CALVERT.

The Weather Bureau has charge of the forecasting of the weather; the issue and display of weather forecasts and storm, cold-wave, frost, and flood warnings; the gauging and reporting of river stages; the maintenance and operation of the United States Weather Bureau telegraph and telephone lines; the collection and transmission of marine intelligence for the benefit of commerce and navigation; the reporting of temperature and rainfall conditions for agricultural interests; and the taking of such meteorological and seismological observations as may be necessary to determine and record the climatic and seismic conditions of the United States.

Forecast Division. HENRY E. WILLIAMS, *in charge*.

This division receives and charts, twice daily, telegraphic reports of the prevailing weather conditions and issues a statement of impending weather changes in all parts of the country. In the case of severe disturbances warnings are issued to special storm-warning stations along the Lakes and the seacoast.

River and Flood Division. ALFRED J. HENRY, *in charge*.

This division gives information as to stages of water along the navigable rivers and issues flood warnings. It gathers information on the depth of snowfall in the mountains of the West, for a study of the flow of water in the streams supplying irrigation projects, and on the rate of evaporation from ponds and lakes, in the interest of water storage for irrigation, power development, and navigation. It supervises, on the part of the Weather Bureau, the experiment stations maintained jointly by the Weather Bureau and the Forest Service.

Division of Agricultural Meteorology. J. WARREN SMITH, *in charge*.

This division conducts studies regarding the relation of weather to crops, and collects statistical data required in such studies, having the direction and supervision of co-operative relations with the State experiment stations and other contributing organizations. It supervises the work of about 400 special stations, maintained in connection with the corn, wheat, cotton, sugar, rice, tobacco, fruit, and cattle industries. The division supervises the distribution of special warnings for the benefit of growers of certain crops. Data showing the current weather conditions throughout the country and the effects of those conditions upon important crops are collected and published weekly during the principal crop-growing season and monthly during the remainder of the year; and the issue of weather crop summaries at the various State centers is supervised.

Climatological Division. PRESTON C. DAY, *in charge.*

This division has charge of the collection, study, and publication of climatological data for the United States. It has general supervision of the work of about 4,200 cooperative stations and about 42 special meteorological stations. From these stations are collected the records of daily observations of temperature, precipitation, and other meteorological conditions necessary to establish the history of the climate of the various portions of the United States. It also supervises the equipment and personnel of stations maintained in connection with the principal agricultural activities of the country. The division has supervision of a bulletin issued weekly during the winter months, showing depth of snow on ground, and thickness of ice in rivers and harbors, and from time to time issues special bulletins or papers bearing on climatological subjects. It has charge of the preparation of the climatological portions of the annual reports of the bureau, and supervises the monthly and annual summaries and other publications of the climatological services of the various States. This division has charge of the barometry of the United States, and of the preparation of the normals of pressure, temperature, precipitation, etc. It also collates from reports of marine observers meteorological information pertaining to the oceans, and is charged with the supervision of the radiotelegraph weather service of the Atlantic and Pacific coasts.

Instrument Division. BENJAMIN C. KADEL, *Chief.*

Has supervision of the maintenance of a high standard of instrumentation and equipment for the meteorological and seismological observational work of the Bureau generally, involving the supervision of the installation and methods of use of the instruments and equipment required for meteorological observations of the Bureau in the field; the installation and maintenance of the display equipment of storm-warning stations; supervision of all evaporation work; installation and maintenance of automatic river gages, including the adjustment and application of corrections to instruments in the hands of observers in the field; problems relating to protection from lightning.

Section of Tests and Repairs. STERLING P. FERGUSSON, *in charge.*

Has charge of the testing, standardizing, and repairing of all apparatus, and the designing and constructing of new instrumental equipment required for the work of the Weather Bureau.

Telegraph Division. JOSEPH U. MONROE, *Chief.*

This division receives and transmits all telegrams, arranges and controls telegraph circuits, maintains and repairs United States Weather Bureau telegraph and telephone lines and submarine cables, and examines all telegraph accounts.

Library. CHARLES F. TALMAN, *in charge.*

The library includes standard works of reference and technical books on meteorology and allied sciences and a complete file of the publications of meteorological and climatological services in all parts of the world. A catalogue is prepared of the meteorological contents of all the principal scientific periodicals of the world, including proceedings and transactions of societies. Translations from foreign languages are made in the library. The librarian has charge of the examinations held throughout the bureau for promotion to the scientific grades.

Office of the Editor. CLEVELAND ABBE, JR., *in charge.*

This office edits and supervises the publication of the Monthly Weather Review; it also has general editorial supervision over scientific and semiscientific papers submitted for publication by the bureau, calling attention to such of these as seem appropriate for the Monthly Weather Review or the Journal of Agricultural Research, the daily press, etc. It prepares such summaries and indexes as may be necessary and also notes on the progress of meteorology.

Printing Division. ROBERT SEYBOTH, *Chief.*

This division prints and mails the daily weather map and the various charts and miscellaneous printed matter pertaining to the bureau and has the custody of and distributes station forms.

Division of Supplies. BENJAMIN A. BLUNDON, *Chief.*

This division purchases and issues supplies and is charged with the safe-keeping of all property belonging to the bureau.

Stations and Accounts Division. DELOS T. MARING, *Chief.*

This division audits, adjusts, and prepares for payment all accounts and claims against the bureau; prepares advertisements; issues requests for passenger transportation; prepares the annual estimates of appropriations; transacts all business relating to the finan-

cial interests of the bureau; and supervises the construction of Weather Bureau buildings outside of Washington, including repairs thereto.

Solar Radiation Investigations. HERBERT H. KIMBALL, *in charge*.

Principally concerned with measurements of the rate at which heat is received at the surface of the earth by radiation during the day from the sun and sky combined and from each source separately; also that lost at night, and the relation of these measurements to atmospheric conditions.

Seismological Investigations. WILLIAM J. HUMPHREYS, *in charge*.

These investigations include the collection and study of both instrumental records and personal observations of earthquake phenomena throughout the United States. One of the immediate objects in view is the detailed mapping of the country with reference to existing faults on the lines of weakness of the earth's crust as evidenced by breaks or movements thereon that occasionally take place, causing small local earthquakes. Such maps are of interest to those who have occasion to locate dams and similar important permanent structures.

Aerological Investigations. WILLIS R. GREGG, *in charge*.

This work includes the making of upper air observations at certain field stations by means of kites, and the reduction, study, and publication of the data thus obtained, with the view to extending our knowledge of the dynamics of the atmosphere. The principal observing stations at present are located at Drexel, Nebr., and Ellendale, N. Dak., with four more to be established shortly. Upper air observations will also be made at aviation training camps of the Army by means of pilot balloons; the observations at the kite stations to be established as well as those at the aviation training camps to be largely in cooperation with the Army for the purpose of ascertaining wind conditions that may be experienced at different levels above the surface of the earth, and to secure such other information regarding free air conditions as may be of practicable value to aviators.

Weather Bureau stations and work outside of Washington, D. C.

This bureau maintains throughout the United States, in the West Indies, in Alaska, and in Hawaii about 200 meteorological stations employing from 1 to 10 men each.

For forecast purposes the United States is divided into districts comprising: (1) The upper Mississippi Valley and the Northwest, Henry J. Cox, Chicago, Ill., in charge. (2) Louisiana, Texas, Arkansas, and Oklahoma, Isaac M. Cline, New Orleans, La., in charge. (3) Utah, Colorado, New Mexico, and Arizona, Frederick H. Brandenburg, Denver, Colo., in charge. (4) California, Nevada, Washington, Oregon, and Idaho, Edward A. Beals, San Francisco, Cal., in charge. (5) The remainder of the United States, forecaster on duty (Harry C. Frankenfield or Alfred J. Henry), Washington, D. C., in charge.

For the collection and distribution of climatological data the United States, including Alaska, Porto Rico, and Hawaii, is divided into 45 sections, generally coextensive with States, which, with the names of the officials in charge and the section centers, are as follows:

Alabama: Patrick H. Smyth, Montgomery.
Alaska: Melvin B. Summers, Juneau.
Arizona: Robert Q. Grant, Phoenix.
Arkansas: Harvey S. Cole, Little Rock.
California: Edward A. Beals, San Francisco.
Colorado: Frederick H. Brandenburg, Denver.
Florida: Alexander J. Mitchell, Jacksonville.
Georgia: Charles F. von Herrmann, Atlanta.
Hawaii: Andrew M. Hamrick, Honolulu.
Idaho: Clinton E. Norquest, Boise.
Illinois: Clarence J. Root, Springfield.
Indiana: John H. Armington, Indianapolis.
Iowa: George M. Chappel, Des Moines.
Kansas: Snowden D. Flora, Topeka.
Kentucky: Ferdinand J. Walz, Louisville.
Louisiana: Isaac M. Cline, New Orleans.

Maryland and Delaware: Oliver L. Fassig, Baltimore, Md.
Michigan: Charles F. Schneider, Grand Rapids.
Minnesota: Ulysses G. Purcell, Minneapolis.
Mississippi: William E. Barron, Vicksburg.
Missouri: George Reeder, Columbia.
Montana: William A. Mitchell, Helena.
Nebraska: George A. Loveland, Lincoln.
Nevada: Henry F. Alps, Reno.
New England: John W. Smith, Boston, Mass.
New Jersey: G. Harold Noyes, Trenton.
New Mexico: Charles E. Linney, Santa Fe.
New York: Wilford M. Wilson, Ithaca.
North Carolina: Lee A. Denson, Raleigh.
North Dakota: Orris W. Roberts, Bismarck.
Ohio: William H. Alexander, Columbus.
Oklahoma: J. Pemberton Slaughter, Oklahoma.

Oregon: Edward L. Wells, Portland.
 Pennsylvania: George S. Bliss, Philadelphia.
 Porto Rico: F. Eugene Hartwell, San Juan.
 South Carolina: Richard H. Sullivan, Columbia.
 South Dakota: Montello E. Blystone, Huron.
 Tennessee: Roscoe Nunn, Nashville.
 Texas: Bernard Bunnenmeyer, Houston.

Utah: J. Cecil Alter, Salt Lake City.
 Virginia: Edward A. Evans, Richmond.
 Washington: George N. Salisbury, Seattle.
 West Virginia: Henry C. Howe, Parkersburg.
 Wisconsin: William P. Stewart, Milwaukee.
 Wyoming: Lawrence H. Daingerfield, Cheyenne.

BUREAU OF ANIMAL INDUSTRY.

Chief, JOHN R. MOHLER; Assistant Chief, —————; Chief Clerk, CHARLES C. CARROLL.

The Bureau of Animal Industry has charge of the work of the department relating to the live-stock industry. In general it deals with the investigation, control, and eradication of diseases of animals, the inspection and quarantine of live stock, the inspection of meat and meat food products, and with animal husbandry and dairying.

Animal Husbandry Division. GEORGE M. ROMMEL, *Chief.*

This division studies the breeding and feeding of farm animals and poultry, and passes upon the pure breeding of animals imported into the United States for breeding purposes. The division is engaged in work in cooperation with the War Department in encouraging the breeding of horses for military purposes. It studies also the cost of production of poultry and eggs, methods of improving the quality of farm eggs, and is engaged in the organization of boys' and girls' pig and poultry clubs in cooperation with the States Relation Service of the department and State agricultural colleges.

Animal genetics.—Sewall Wright, in charge.

Beef cattle investigations.—F. W. Farley, in charge.

Horse and mule investigations.—G. Arthur Bell, in charge; Charles C. Glenn.

Poultry investigations.—Harry M. Lamon, in charge.

Sheep and goat investigations.—F. R. Marshall, in charge.

Swine investigations.—Chief of Division George M. Rommel, in charge; F. G. Ashbrook, assistant.

Animal husbandry extension work.—Chief of Division in charge; J. D. McVean.

U. S. experimental farm, Beltsville, Md.—Benjamin F. Brandon, acting assistant, in charge.

U. S. Morgan horse farm, Middlebury, Vt.—W. F. Hammond, in charge.

Biochemic Division. M. DORSET, *Chief.*

This division prepares tuberculin and mallein for free distribution to health officers for use in official tests; conducts experiments with the object of obtaining vaccines and antitoxins for animal diseases; carries on researches concerning the causes of certain infectious diseases; takes part in the control of viruses, serums, toxins, and analogous products intended for use in the treatment of domestic animals; carries on experiments with dips and disinfectants; and assists in enforcing the insecticide act of 1910 by examining articles intended for use in combating insects and fungi which infest domestic animals. It carries on bacteriological and chemical research work relative to meat and meat food products in connection with the meat inspection.

Scientists in charge of sections.—J. A. Emery, assistant chief and member of the Insecticide and Fungicide Board; C. N. McBryde, in charge of bacteriological investigations of meats; R. M. Chapin, in charge of dips and disinfectants; Ralph Hoagland, in charge of biochemical investigations of meats; W. B. Niles, in charge of hog-cholera serum production.

Dairy Division. B. H. RAWL, *Chief*; L. W. LARSON, *Dairy Expert.*

This division collects and disseminates information concerning dairy farming, the care and improvement of dairy cattle, and the production, care, and distribution of dairy products. It is charged also with the details of administration of the laws concerning the inspection of factories and markets for "renovated" or "process" butter. It carries on research concerning the chemistry and bacteriology of dairy products and in engineering problems that affect various branches of the dairy industry. It also co-operates with State and local institutions in educational work in dairying.

Miscellaneous.—D. Stuart, dairy husbandry; H. P. Davis, editor; R. R. Graves, dairy cattle-breeding; K. E. Parks and J. E. Bowen, dairy engineers; T. R. Pirtle, assistant in dairy manufacturing.

Research laboratories.—L. A. Rogers, in charge; S. H. Ayers, N. R. Blatherwick, F. R. Cammack, W. M. Clark, P. W. Clemmer, J. N. Currie, E. F. Deysher, D. C. Dyer, Alice C. Evans, W. T. Johnson, jr., K. J. Matheson, E. B. Meigs, C. S. Mudge, P. Rupp, R. H. Shaw, J. M. Sherman, O. E. Williams, P. A. Wright, A. C. Weimar, H. F. Zoller.

Dairy farming investigations and demonstrations.—Helmer Rabild, in charge; R. F. Flint, R. C. Jackson, J. B. Shepherd. This work includes: (1) Southern dairying: J. H. McClain, in charge; H. E. Baker, S. B. Durham, L. A. Higgins, W. H. Howell, C. A. Hutton, J. P. LaMaster, R. L. Pou, J. P. Quinerly, A. J. Reed, D. W. Watkins. (2) Dairy work in tick-free areas: J. A. Arey, J. M. Burgess, H. T. Converse, R. H. Mason, J. B. Parker, A. B. Pike, G. R. Skinner, H. H. Whiting. (3) Dairy community development: R. R. Welch. (4) Cow-testing associations and bull associations, and dairy work with county agents: J. Ausen, J. W. Bartlett, H. W. Cave, R. B. Cooley, J. C. Court, W. P. Davis, W. I. Kellogg, Ivan McKellip, W. A. McKerrow, T. W. Mosceley, K. B. Musser, N. A. Negley, G. L. Oliver, D. H. Propps, H. C. Searles, H. G. Stevens, J. A. Waldron, J. G. Winkjer, G. E. Wolcott, H. E. Young. (5) Dairy demonstration farm in Texas: A. M. Goodman.

Dairy manufacturing investigations and renovated-butter inspection.—S. C. Thompson, in charge; L. H. Burgwald, H. B. Cannon, E. L. Chaplin, W. I. Clevenger, A. O. Dahlberg, C. F. Doane, L. S. Edwards, F. R. Farnham, C. M. Gere, T. C. Haddon, V. R. Jones, J. C. Joslin, L. H. Marlatt, T. E. Meehan, H. S. Merry, C. E. Newlander, D. R. Noland, E. H. Krause, F. L. Odell, R. J. Scoville, M. P. A. Sondergaard, O. A. Storvick, J. L. Thomas, C. S. Trimble, W. B. Thurston, G. N. Tobey, William White, W. E. Wintermeyer.

Market milk investigations.—Ernest Kelly, in charge; J. B. Bain, C. J. Babcock, G. E. Braun, C. E. Clement, C. H. Cook, J. A. Gamble, R. J. Posson, R. S. Smith, G. B. Taylor, Benjamin Vener, C. W. Wescott, W. D. Wood.

Western dairy investigations.—J. E. Dorman, in charge; E. F. Burton, B. R. Eldredge, E. V. Ellington, G. E. Frevert, O. E. Gibson, C. F. Hoyt, N. C. Jamison, W. E. Meyer, V. E. Scott, W. E. Tomson, J. E. Watt, E. L. Westover.

Beltsville farm.—T. E. Woodward, superintendent; J. B. McNulty, assistant.

Metabolism in dairy cows.—H. P. Armsby, in charge; W. W. Braman, J. A. Fries, E. W. Schmidt.

Experiments and demonstrations in live-stock production.—Iberia Live-Stock Farm, Jeanerette, La.; C. E. Mauldin, superintendent; Arthur Fischer, J. R. Quesenberry, L. C. Shockley, R. R. Graves, H. P. Davis. Live-Stock Extension Service: G. E. Nesom, in charge; C. W. Radway, A. F. Rolf, F. W. Spencer, C. H. Staples.

Experiments in dairying and live-stock production in Western United States.—B. H. Rawl, R. R. Graves, H. P. Davis, Melvin Moss.

Field Inspection Division. A. W. MILLER, *Chief*.

This division, in cooperation with State authorities, is charged with the work of eradicating scabies in cattle and sheep and dourine in horses.

Inspectors in charge of scabies and dourine eradication in the field.—H. J. Hammond, Sacramento, Cal.; J. C. Exline, Walla Walla, Wash.; F. E. Murray, Salt Lake City, Utah; F. L. Schneider, Albuquerque, N. Mex.; W. E. Howe, Denver, Colo.; H. H. Cohenour, Bismarck, N. Dak.; I. B. Paxton, San Angelo, Tex.; James Fleming, Kansas City, Kans.

Meat Inspection Division. R. P. STEDDOM, *Chief*.

The work of the Meat Inspection Division includes the ante-mortem and post-mortem inspection of cattle, sheep, swine, and goats slaughtered at establishments engaged in interstate or foreign commerce; the supervision of such establishments and of the various processes of preparing, curing, canning, packing, etc., so as to insure sanitary conditions, equipment, and methods; the laboratory examination of meat and products and all ingredients used in the preparation thereof; the condemnation and proper disposal of carcasses and products found to be diseased, unwholesome, or otherwise unfit for human food; the marking and certification of meats and products that have been inspected and passed; and the regulation and supervision of the interstate transportation, exportation, and importation of meats and meat food products.

Assistants.—George Ditewig, in charge of western division; A. J. Pistor, in charge of eastern division.

T. M. Price, in charge of central meat-inspection laboratory.

G. H. Parks, architect; G. H. Shaw, sanitary engineer.

A directory showing the 240 meat-inspection stations and inspectors in charge may be obtained on application to the bureau.

Miscellaneous Division. A. M. FARRINGTON, *Chief*; IRVING W. PEW, *Assistant in charge of Appointment Section*.

This division keeps the records of the projects of work in which the bureau is engaged; has charge of the work relating to the personnel, such as appointments, transfers, assignments to duty, efficiency records, etc.; endeavors to promote veterinary education and to assist veterinary colleges in providing adequate courses of instruction to qualify men for the veterinary service of the bureau; and attends to miscellaneous duties.

Pathological Division. JOHN S. BUCKLEY, *Acting Chief*.

This division conducts scientific investigations of animal diseases; carries on experiments with immunizing agents for the purpose of protecting animals against disease; co-operates with the State agricultural experiment stations with a view to combating diseases peculiar to the localities; determines pathological specimens referred to the division for diagnosis; prepares and distributes blackleg vaccine; and investigates effects of poisonous plants on live stock.

Scientific staff.—H. J. Washburn, senior bacteriologist; A. R. Ward, senior pathologist; Robert J. Formad, pathologist; B. A. Gallagher, bacteriologist in charge of investigations concerning diseases of poultry; L. T. Giltner, in charge of investigations of miscellaneous diseases of animals; J. M. Buck, bacteriologist in charge of investigations in contagious abortion; G. T. Creech, assisting in contagious abortion investigations; H. H. Ladson, field investigations in contagious abortion; A. A. Goodman, field investigations in contagious abortion; W. L. Williams, cooperating in investigations in contagious abortion; H. W. Schoening, in charge of investigations in dourine and glanders; F. H. Reynolds, assisting in investigations in dourine and glanders; W. S. Gochenour, assistant in bacteriology; C. B. Breininger, in charge of blackleg investigations; R. A. Kelsner, in charge testing bacteriological products; W. N. Berg, physiologist and chemist; C. D. Marsh, in charge of poisonous plant investigations; A. B. Clawson, physiologist in poisonous plant investigations; J. F. Couch, junior chemist in poisonous plant investigations; H. C. Campbell, in charge of experiments in cooperation with Pennsylvania Live Stock Sanitary Board; L. Enos Day, in charge of branch pathological laboratory at Chicago, Ill.; George Byron Morse, in charge of branch pathological laboratory at South Omaha, Nebr.

Quarantine Division. RICHARD W. HICKMAN, *Chief*; GEORGE W. POPE, *Assistant Chief*.

The inspection and quarantine of imported animals with a view to excluding contagion, the management of the animal quarantine stations, and the inspection of live stock for export come under this division. The ships carrying exported animals are also inspected, and regulations as to fittings, equipment, ventilation, feed, water, attendants, etc., are enforced. The Quarantine Division administers the sanitary regulations governing the importation of hides and skins, glue stock, hair, wool, and other animal by-products, hay, straw, forage, etc., and directs the tuberculin testing of cattle and the mallein testing of horses for export and import.

Tick Eradication Division. R. A. RAMSEY, *Chief*; W. P. ELLENBERGER, *Assistant*.

This division, in cooperation with State live-stock sanitary organizations in the Southern States, is charged with the work of eradicating ticks which infest cattle and transmit disease. It also has supervision of the interstate movement of cattle from the area under quarantine for cattle ticks.

Inspectors in charge of tick eradication in the field.—L. J. Allen, Oklahoma, Okla.; Harry Grafke, Fort Worth, Tex.; J. B. Reidy, Houston, Tex.; A. E. Wight, Little Rock, Ark.; E. I. Smith, Baton Rouge, La.; R. E. Jackson, Birmingham, Ala.; J. A. Barger, Jackson, Miss.; W. M. MacKellar, Atlanta, Ga.; E. M. Nighbert, Jacksonville, Fla.; W. K. Lewis, Columbia, S. C.; E. P. Yager, Washington, N. C.

Tuberculosis Eradication Division. J. A. KIERNAN, *Chief*.

This division, in cooperation with State authorities, is charged with the work of eradicating tuberculosis of farm animals. It has supervision over the interstate transportation of live stock, including inspection, disinfection, certification, etc.; also the details of administering the 28-hour law governing the humane handling of live stock in transit; and the tuberculin testing of cattle and the mallein testing of horses, etc., for interstate movement.

Inspectors in charge of tuberculosis eradication in the field.—R. E. Brookbank, Richmond, Va.; W. G. Benner, Springfield, Mass.; J. A. Barger, Jackson, Miss.; R. E. Jackson, Birmingham, Ala.; W. K. Lewis, Columbia, S. C.; H. E. Smith, Indianapolis, Ind.; R. H. Treacy, St. Paul, Minn.; F. E. Murray, Salt Lake City, Utah; Sam. B. Foster, Portland, Oreg.; Wm. M. MacKellar, Atlanta, Ga.

Zoological Division. B. H. RANSOM, *Chief*.

This division investigates diseases of parasitic origin, collects and describes animal parasites of all kinds, determines such parasites as are sent to the bureau for identification, and keeps a card index of animal parasites and a bibliography of literature relating to them.

Scientific Staff.—Albert Hassall, assistant zoologist; Howard Crawley, in charge of investigations of parasitic protozoa; W. D. Foster, L. N. Garlough, H. G. May, and Benjamin Schwartz, junior zoologists; Marion Imes, in charge of investigations on the treatment and external parasites, Kansas City, Kans.; Cooper Curtice, in charge of experiments in the eradication and control of internal parasites of sheep, Vienna, Va.

Office of Hog Cholera Control. O. B. HESS, *in Charge*; T. P. WHITE, *Assistant*.

The work of this office has for its object the suppression and control of hog cholera. The work is conducted in cooperation with the educational forces of agricultural colleges and State regulatory authorities legally charged with the investigation, control, and eradication of contagious and infectious diseases of live stock.

Work is now being conducted in the following States: Alabama, Arkansas, California, Delaware, Florida, Georgia, Iowa, Indiana, Idaho, Illinois, Kansas, Kentucky, Louisiana, Michigan, Missouri, Maryland, New Mexico, North Carolina, Nebraska, Ohio, Oklahoma, South Dakota, South Carolina, Texas, Tennessee, Utah, Virginia, West Virginia.

Office of Virus-Serum Control. H. J. SHORE, *in Charge*; D. I. SKIDMORE, *Assistant*.

This office is charged with the enforcement of the virus-serum-toxin act of 1913, which regulates the preparation, sale, barter, exchange, shipment, and importation of all viruses, serums, toxins, and analogous products intended for use in the treatment of domestic animals. Licenses are issued for the preparation of veterinary biological products at domestic establishments, and permits are issued to importers of such products. Inspections are made of the establishments of all firms making application for license. This inspection covers the construction and equipment of the plant, the methods employed in the preparation of products, and the manner of keeping records. General supervision over the preparation and testing of all products is maintained in order to insure, so far as possible, that the products are not worthless, contaminated, dangerous, or harmful within the meaning of the act.

Experiment Station. E. C. SCHROEDER, *Superintendent*.

The Experiment Station of the bureau is located at Bethesda, Md. It conducts investigations of animal diseases with a view to their control and eradication and their bearing on the public health. A small farm is maintained in such a manner as to provide the other divisions of the bureau with facilities for making observations for which large domestic animals are needed. The work of the station consists of both independent original investigations and investigations in cooperation with and supplemental to those of the other divisions.

W. E. Cotton, assistant superintendent; George W. Brett, scientific assistant.

Editorial Office. JAMES M. PICKENS, *Editor*.

This office edits manuscripts prepared in the bureau, compiles and prepares information and material for publication and other uses, attends to correspondence relating to publications and miscellaneous subjects, makes translations, reads proof, duplicates circular letters, etc.

FOREST SERVICE.

[Those whose names are starred (*) are on furlough for military service.]

Forester, HENRY S. GRAVES *; *Associate Forester*, ALBERT F. POTTER;
Forest Inspector, ARTHUR C. RINGLAND.*

The Forest Service administers the national forests, studies forest conditions and methods of forest utilization, investigates the mechanical and physical properties of woods and the processes employed in the manufacture of forest products, and gathers information concerning the needs of the various wood-using industries and the relation of forests to the public welfare generally.

The work of the Forest Service is organized under the Office of the Forester, 6 branches, 7 districts, 148 national forests, and 14 purchase areas.

Office of the Forester.

Office of the Editor. HERBERT A. SMITH, *Editor*; FINDLEY BURNS, *in charge of technical review*; JOHN L. COBBS, Jr., *in charge of information*; DON CARLOS ELLIS, *in charge of educational cooperation*; C. M. BALLARD, *in charge of proofs and forms*.

This office disseminates information concerning forestry through the public press and other channels and performs the editorial and educational work of the service, including

the review and proof reading of publications and forms; cooperation with teachers, officers of public instruction, and others; the preparation, installation, and care of forest exhibits; and the care and use of the lantern-slide and photograph collections.

Dendrologist. GEORGE B. SUDWORTH.

The dendrologist is charged with investigations relating to the life history of native and exotic forest trees, their geographic distribution, distinguishing characteristics, habits and associations in the formation of forests, etc.; also the selection, adaptation, and care of trees for shade and ornamental purposes.

Accounts. M. E. FAGAN, *Chief*.

This office is in charge of all fiscal affairs pertaining to the Forest Service—general bookkeeping, controlling accounts, allotments, and liabilities, and all operations of district fiscal agents.

Branch of Operation.

D. D. BRONSON, *Forest Inspector*; A. O. WAHA, *Forest Inspector*; ALLEN, S. PECK,* *Forest Inspector*; G. G. ANDERSON, *Inspector of Records*.

This branch has general supervision of estimates and allotments, personnel, quarters, equipment and supplies, and of fire protection and permanent improvement work on the national forests.

Maintenance. B. I. SHANNON, *Chief*.

The work of this office includes all matters relating to the care of quarters and the purchase and custody of supplies, furniture, instruments, and other equipment in Washington, D. C.

Branch of Silviculture.

W. B. GREELEY,* *Assistant Forester in Charge*; R. Y. STUART,* *Forest Inspector*; E. E. CARTER, *Forest Inspector*; AUSTIN CARY, *Logging Engineer*; HARRY IRION, *Office Assistant*.

Through the district foresters the Branch of Silviculture has supervision of timber sales, timber and fire trespass, and reforestation on the national forests, and of working plans for their better administration. It cooperates with the States and private owners in fire protection and the practice of forestry.

State Cooperation. J. G. PETERS, *Chief*.

This office, in cooperation with the States, investigates forest conditions and suggests needed legislation and forest policies; prepares digests of State forest laws; cooperates with a number of States, under the Weeks law (act of Mar. 1, 1911), in the protection of the watersheds of navigable streams; directs expenditures for this purpose; and inspects the work done in the field.

Inspection.—L. S. Murphy.

Development of Private Forestry. E. S. BRYANT,* *Chief*.

Branch of Grazing.

WILL C. BARNES, *Assistant Forester in charge*; J. W. NELSON, *Inspector of Grazing*.

The Branch of Grazing has, through the district foresters, general supervision of the range in the national forests. When the number of stock to be allowed on each national forest has been determined by the Secretary of Agriculture, the Branch of Grazing establishes the year-long grazing fee to be charged for each class of stock. It also conducts investigations concerning the best use of the forage resources of the national forests.

Grazing Studies. JAMES T. JARBINE, *Inspector of Grazing, in charge*.

This office deals with investigations aimed to bring about more efficient utilization by live stock of the annual forage crop produced on ranges within the national forests. It is also directing the survey and type classification of range lands within the national forests.

Branch of Lands.

E. A. SHERMAN, *Assistant Forester in charge*; W. J. MANGAN, *Examiner*.

This branch has general supervision of all matters relating to the application of the public-land laws to the lands within the national forests, and the uses of national forest lands other than timber sales and grazing.

Land Classification. JOHN D. JONES, *in charge*.

Examination and classification of lands within the national forests to determine their value for forest purposes.

Settlement. F. L. HARVEY, *in charge*.

Administration of the forest homestead act of June 11, 1906.

Boundaries. B. L. WHEELER, *in charge*.

Revision of forest boundaries and general classification of lands within national forests as to their value for forest purposes.

Entry Surveys. R. V. R. REYNOLDS, *in charge*.

Survey of forest homesteads in the national forests under instructions issued by the surveyors general of the General Land Office.

Claims and Occupancy. CHARLES H. SQUIRE, *in charge*.

This office has general supervision of all work pertaining to the examination of, and reporting on, lands within the national forests title to which is sought under the public-land laws. Where the acquisition of title is opposed the office cooperates with the office of the Solicitor in procuring necessary evidence. The office also has general charge of all matters relating to the occupancy of national forest land for any purpose except grazing. This includes the granting of rights of way for railroads, irrigation projects, etc.

Branch of Research.

EARLE H. CLAPP, *Assistant Forester in charge*.

This branch has general supervision, either directly or through the district foresters, of forest investigations, protection studies, the silvicultural experiment stations, and the Forest Products Laboratory; investigations of wood, wood products, the lumber and other wood-using industries, logging costs, mill and market studies, forest statistics, including the collection of statistics of the wood-using industries, general economic questions bearing on forestry, and forest administration.

Forest Investigations. RAPHAEL ZON, *Chief*; S. T. DANA, *Assistant Chief*.

The Office of Forest Investigations deals mainly with the scientific problems underlying the management of forests. It directs the work at the national forest experiment stations through the district foresters and investigates the factors controlling the distribution of forests and forest trees, the relation of forest to stream flow and climate, the conditions under which natural regeneration of cut-over, burned-over, or otherwise denuded areas takes place, and the species and methods adapted to use in artificial reforestation under varying site conditions. It also studies the requirements of important species as to climate, soil, moisture, and light. It identifies field specimens and studies the commercial and botanical range of trees. The office conducts investigations of woodlots and, in cooperation with the extension agents of the States, demonstrates the best methods of handling them with special reference to marketing the product and caring for the timber crop. The library of the Forest Service is connected with the office; it contains 18,200 books and pamphlets on forestry and allied subjects.

Studies.—E. H. Frothingham, G. N. Lamb, Benton MacKaye, W. D. Sterrett, C. R. Tilton, E. R. Hodson; A. F. Hawes and W. R. Mattoon (in cooperation with the States Relation Service); G. E. Clement and W. N. Munro (in cooperation with the Bureau of Entomology).

Forest Distribution.—W. H. Lamb, Miss Georgie Wharton.

Library.—Miss H. E. Stockbridge.

Forest Measurements.—W. B. Barrows.

Compilation.—Miss Elizabeth B. Leech.

Industrial Investigations. H. S. BETTS, *in charge*.

This office studies the wood-using industries of various States, woods used in manufacture, and methods of disposing of mill waste; collects statistics on the price of lumber at the mill and at the principal distributing markets of the country; and studies specifications and grading rules. The office also secures statistics of importance to the experimental work of the service and studies the movements of lumber to and from the principal markets.

Studies.—W. D. Brush, J. T. Harris, R. K. Helpenstine, jr., J. C. Nellis, Franklin H. Smith, A. H. Pierson, and A. M. McCreight.

Forest Products Laboratory. C. P. WINSLOW, *Director*; OVID M. BUTLER, *Assistant Director*.

A forest-products laboratory is maintained in cooperation with the University of Wisconsin, at Madison. The laboratory conducts the following classes of experimental investigations in the utilization of forest products: (1) Investigation of problems in experimental research; (2) experimental work in cooperation with commercial operations to verify laboratory experiments on a commercial scale; (3) cooperation with individuals or companies to assist them in applying principles and processes of proved commercial value. The lines of work pursued include wood preservation, wood chemistry, timber tests, and wood technology.

Commercial Extension.—Rolf Thelen.

Review of Results.—Frank J. Hallauer.

Lumber Studies.—Henry V. Hegel, in charge; D. G. White.

Derived Products.—Ernest Bateman, L. F. Hawley, S. A. Mahood, R. E. Kremers, Howard N. Calderwood.

Engineering.—A. L. Helm, in charge; James O. Bixby.

Maintenance.—Chas. P. Juckem, in charge.

Pulp and Paper.—Otto Kress, in charge; Sidney D. Wells, H. E. Surface, G. C. McNaughton, Sidney E. Lunak, A. S. Cosler, Chas. R. Cressy.

Timber Tests.—John A. Newlin, in charge; A. K. Armstrong, Thomas R. C. Wilson, Leslie R. Morris, L. J. Markwardt, Armin Elmendorf, Cecil V. Maudlin, Chas. B. Norris, Walter R. Webb, Walter C. Mackey.

Timber Physics.—H. D. Tiemann, in charge; Eloise Gerry, M. E. Diemer, James E. Imrie, A. Koehler, Gertrude Griffin, Milton H. Hostman, C. A. Kupfer, C. W. Gould, M. I. Mueller, James D. Studley.

Wood Preservation.—C. H. Teesdale, in charge; Geo. M. Hunt, P. R. Hicks, M. C. Jensen, M. E. Dunlap.

Pathology.—C. J. Humphrey, in charge; C. Audrey Richards.

Branch of Engineering.

O. C. MERRILL, *Chief Engineer in charge*.

This branch has general supervision of engineering matters, the administration of water-power uses, and preparation of road-development plans in connection with national forest administration, and cooperates with the other branches on plans, specifications, and technical details.

Roads. T. W. NORCROSS, *Assistant Chief Engineer in charge*.

General administration and field inspection of road work under the 10 per cent appropriation and Federal Aid Road Act. Examination and coordination of road plans for the several States, approval of road maps, plans, and specifications, and preparation of cooperative agreements with local authorities.

Water Power. LYLE A. WHITSIT, *Assistant Engineer in charge*.

General administration and field inspection of water-power and transmission line uses. Report upon applications for easements affecting national forest lands. Examination of proposed alienations, eliminations, additions, and withdrawals where water power is involved.

Forest Maps and Surveys. FRANK E. BONNER, *Assistant Engineer in charge*; C. A. KOLB, *Geographer*.

General administration and field inspection of land, boundary, and other surveys. Establishment of standards in instruments and methods of survey. Supervision and field inspection of mapping and drafting, and maintenance of forest folios and map files.

Acquisition of Lands under the Weeks Law.

WM. L. HALL, *Assistant Forester in charge*; W. W. ASHE, *in charge of Appraisal of Lands*; R. DIFFENBACH, *in charge of Survey of Lands*.

This office designates the areas where lands are to be purchased, receives proposals, examines lands, conducts tentative negotiations, prepares recommendations to the Secretary of Agriculture and the National Forest Reservation Commission, and makes surveys of lands to be acquired under the act of March 1, 1911, for the protection of the watersheds of navigable streams.

Districts.

District 1.—National forests in **Montana**, northern Idaho, northeastern Washington, and the northwest corner of South Dakota; headquarters at Missoula, Mont. F. A. Silcox,* district forester.

District 2.—National forests in Colorado, Nebraska, the greater part of South Dakota, eastern and central Wyoming, Minnesota, and Michigan; headquarters at Denver, Colo. Smith Riley, district forester.

District 3.—National forests in most of Arizona and all of New Mexico; headquarters at Albuquerque, N. Mex. F. C. W. Pooley, acting district forester.

District 4.—National forests in Utah, northwestern Arizona, most of Nevada, southern Idaho, and western Wyoming; headquarters at Ogden, Utah. L. F. Kneipp, district forester; A. H. Cousins, property assistant; J. G. Falck, property auditor.

District 5.—National forests in California and western Nevada; headquarters at San Francisco, Cal. Coert Du Bois,* district forester.

District 6.—National forests in Washington, Oregon, northwestern California, and Alaska; headquarters at Portland, Oreg. George H. Cecil, district forester.

District 7.—National forests and purchase areas in Arkansas, Florida, Oklahoma, Porto Rico, South Carolina, Georgia, North Carolina, Tennessee, Virginia, West Virginia, Alabama, and New Hampshire; headquarters at Washington, D. C. W. L. Hall, district forester; F. W. Reed, assistant district forester; H. O. Stabler, assistant district forester; Francis Kiefer,* assistant district forester.

Within each district (except district 7) the Offices of Operation, Silviculture, Grazing, Products, Lands, and Engineering perform duties similar to those performed by the corresponding branches outside the districts. The assistant district foresters in charge of these offices in the several districts are as follows:

Operation.—(1) R. H. Rutledge; (2) Fred. W. Morrell; (3) Don P. Johnston; (4) A. C. McCain; (5) Roy Headley; (6) C. H. Flory.

Silviculture.—(1) J. F. Preston; (2) C. M. Granger*; (3) H. H. Chapman; (4) Clinton G. Smith; (5) T. D. Woodbury; (6) F. E. Ames.

Grazing.—(1) C. H. Adams; (2) John H. Hatton; (3) John Kerr; (4) Homer E. Fenn; (5) C. E. Rachford; (6) T. P. McKenzie.

Products.—(5) Cary Hill; (6) H. B. Oakleaf*; (7) S. L. Wolfe.*

Lands.—(1) F. A. Fenn; (2) C. J. Stahl; (3) Frank C. W. Pooler; (4) C. N. Woods; (5) L. A. Barrett; (6) C. J. Buck.

Research.—(4) C. F. Korstian.

Engineering.—(1) ———; (2) R. E. Pratt; (3) C. A. Long, acting; (4) J. P. Martin; (5) F. H. Fowler; (6) ———; (7) H. O. Stabler.

BUREAU OF PLANT INDUSTRY.

Physiologist and Pathologist and Chief of Bureau, WILLIAM A. TAYLOR; *Physiologist and Associate Chief of Bureau*, KARL F. KELLERMAN; *Chief Clerk*, JAMES E. JONES; *Officer in charge of Publications*, J. E. ROCKWELL; *Officer in charge of Records*, W. P. COX.

The Bureau of Plant Industry studies plant life in all its relations to agriculture. The scientific work of the bureau is divided into 31 distinct groups, over each of which is placed a scientifically trained officer, who reports directly to the chief and assistant chief of the bureau. The work of the bureau is conducted on the project plan, the investigations under each of the officers being arranged by group projects consisting of closely related lines of work. These group projects are further divided into subprojects.

Laboratory of Plant Pathology. ERWIN F. SMITH, *Pathologist in charge.*

This is the central working laboratory for all of the pathological investigations conducted by the bureau. Studies of the diseases of a wide variety of crop plants are made in the laboratory and supplemented by field investigations and experimentation.

Scientific staff.—R. E. B. McKenney, pathologist; Frederick V. Rand, Florence Hedges, Nellie A. Brown, and Lucia McCulloch, assistant pathologists; Mary K. Bryan, Harry Braun, Ella M. Enlows, and Lillian C. Cash, scientific assistants.

Plant Disease Survey. GEORGE R. LYMAN, *Pathologist in charge.*

This office records the geographical distribution, annual prevalence, and rate of spread of diseases of economic plants in the United States, and estimates the amount of loss occasioned by them; studies epidemics and unusual outbreaks of disease in relation to various environmental factors; gathers data on the resistance and susceptibility of varieties to disease, practical effectiveness of various control methods, and other points of value in disease control work. All data collected is issued in the form of reports and

bulletins. The office maintains close cooperative relations with pathologists and agriculturists generally.

Scientific staff.—Royal J. Haskell and J. H. Muncie, pathological inspectors.

Pathological Collections. FLORA W. PATTERSON, *Mycologist in charge.*

This office maintains economic collections of pathological and related material; identifies edible and poisonous fungi; studies problems in entomogenous fungi; conducts taxonomic work in cooperation with various offices of the bureau; and makes miscellaneous identifications. In addition to securing new species of pathological fungi and systematically inserting them where they may be readily available for study, card indexes are maintained which refer to descriptions of fungi or relate to mycological or pathological subjects.

Scientific staff.—Vera K. Charles, assistant mycologist; Anna E. Jenkins, scientific assistant; Edith K. Cash, botanical translator.

Fruit Disease Investigations. MERTON B. WAITE, *Pathologist in charge.*

These studies deal with diseases of fruits and fruit trees and methods of controlling or preventing them. They cover deciduous orchard fruits, citrus fruits, small fruits, and the cultivated nuts. Field demonstrations are an important part of the work.

Scientific staff.—C. L. Shear, Charles Brooks, W. S. Ballard, Harry R. Fulton, J. W. Roberts, and Neil E. Stevens, pathologists; Clara H. Hasse, Durward F. Fisher, S. M. McMurran, and John R. Winston, assistant pathologists; J. S. Cooley, E. M. Harvey, Angie M. Beckwith, Lee M. Hutchins, Henry A. Lee, Bert A. Rudolph, Eugene A. Siegler, Raymond B. Wilcox, and H. F. Bergman, scientific assistants; J. M. Shull, botanical artist; and Leslie Pierce, assistant in spraying experiments and demonstrations.

Eradication of Citrus Canker. Directed by Associate Chief of Bureau.

In cooperation with the Southern States in which citrus fruits are grown work is being conducted for the purpose of eradicating citrus canker, by the thorough inspection of nurseries and citrus groves, formalin treatment of infected soil, protective spraying of groves exposed to infection, and destruction of diseased trees. The following-named State officials are in local charge of the cooperative campaigns in their respective States, and approximately 625 agents are engaged in the work: Wilmon Newell, State plant commissioner, Florida; G. C. Starcher, State horticulturist, Alabama; E. Lee Worsham, State entomologist, Georgia; J. B. Garrett, acting director and entomologist of the North Louisiana Agricultural Experiment Station, Louisiana; R. W. Harned, State entomologist, Mississippi; Ed. L. Ayers, chief inspector of orchards and nurseries for the State, Texas.

Investigations in Forest Pathology. HAVEN METCALF, *Pathologist in charge.*

This office studies various diseases affecting forest trees and timber, as well as ornamental and shade trees. The work is conducted in close cooperation with the Forest Service.

Scientific staff.—George G. Hedgecock, C. J. Humphrey, and Perley Spaulding, pathologists; E. P. Meinecke, J. Franklin Collins, James R. Weir, William H. Long, and Carl P. Tuttle, forest pathologists; John S. Boyce, George F. Gravatt, Reginald H. Colley, and Nicholas R. Hunt, assistant pathologists; Samuel B. Detwiler, forest pathologist; Roy G. Pierce, forest assistant; Rush P. Marshall, pathological inspector; Ernest E. Hubert, Glenn G. Hahn, Gilbert B. Posey, and Paul V. Siggers, scientific assistants; Arthur S. Rhoads, Minnie W. Taylor, assistants in forest pathology.

Cotton, Truck, and Forage Crop Disease Investigations. W. A. ORTON, *Pathologist in charge.*

These investigations cover diseases of garden vegetables, including field demonstration of methods of control and prevention; diseases of cotton, and of cowpeas and other forage crops, and related plants.

Scientific staff.—L. P. Byars, H. A. Edson, W. W. Gilbert, L. L. Harter, R. A. Jehle, Fred R. Jones, L. O. Kunkel, Geo. K. K. Link, and E. S. Schultz, pathologists; J. B. Norton and F. J. Pritchard, physiologists; W. B. Clark, biochemist; H. G. MacMillan, Joseph Rosenbaum, L. O. Watson, and J. L. Welmer, assistant pathologists; Wm. N. Ankeney, G. H. Godfrey, H. H. Haymaker, G. A. Meckstroth, J. A. Simpson, and John C. Walker, scientific assistants; Michael Shapovalov and H. B. Tisdale, agents; J. A. McClintock and G. B. Ramsey, collaborators; F. C. Meler, student assistant; J. W. Sanders, field aid in plant pathology.

Crop Physiology and Breeding Investigations. WALTER T. SWINGLE, *Physiologist in charge.*

This office investigates the physiology of crop plants with a view to determining the limiting factors which control their successful culture and the breeding and testing of new

varieties. Several field stations are maintained. Field investigations are conducted on some of the Indian reservations of the Southwest for testing crop plants which seem likely to be suited for culture by the Indians and by white settlers in adjoining regions. Dates, Smyrna figs, hardy citrus fruits, pistaches, and certain drought-resistant tree crops are being tested.

Scientific staff.—S. C. Mason, arboriculturist; G. P. Rixford, physiologist; Maude K. Swingle, botanical assistant; E. M. Savage, assistant plant breeder; Bruce Drummond, assistant; Tyozaburo Tanaka, botanical translator; Esten W. Campbell and Edgar A. Palmer, agents.

Soil Bacteriology Investigations. Directed by Associate Chief of Bureau.

This work is a study of the relation of bacteria to soil fertility, plant growth, cellulose destruction, and the fixation of nitrogen. Pure cultures of nodule-forming bacteria for leguminous crops are distributed.

Scientific staff.—Felix Löhnis, soil biologist; F. M. Scales, assistant soil mycologist; F. L. Goll, R. C. Wright, and Lewis T. Leonard, assistant physiologists; N. R. Smith, scientific assistant.

Soil Fertility Investigations. OSWALD SCHREINER, *Biochemist in charge.*

This office studies the causes of and remedy for infertility in certain soils, whether natural or arising from improper methods of cultivation and cropping. It separates, identifies, and studies certain organic substances found in unproductive soils, and corrects their evil effects by mechanical handling, by the use of fertilizers, and by other methods available to the farmer. It makes a study of the action of fertilizers on field crops.

Scientific staff.—Bailey E. Brown, Joshua J. Skinner, Elbert C. Lathrop, Edward H. Walters, Louis J. Gillespie, Louis E. Wise, biochemists; Alfred P. Dachnowski, physiologist; Fred R. Reid, Lewis A. Hurst, Rolla N. Harger, and Alfred W. Francis, assistant biochemists; Henry Winckelmann, scientific assistant; Albert M. Jackson, laboratory aid.

Crop Acclimatization and Adaptation Investigations. O. F. COOK, *Biochemist in charge.*

These investigations have special reference to the acclimatization in the South and Southwest of Central American varieties of cotton, corn, and other tropical crop plants. The breeding of cottons for the boll-weevil territory is a special feature.

Scientific staff.—G. N. Collins and H. Pittier, botanists; D. A. Saunders, plant breeder; P. V. Cardon, assistant agronomist; J. G. Gurley, assistant; C. B. Doyle, assistant botanist; G. B. Gilbert, J. H. Kempton, C. G. Marshall, Guy S. Meloy, and Henry M. Steece, assistants in crop acclimatization; W. B. Camp and D. M. Simpson, agents; S. H. Hastings, farm superintendent.

Fiber-Plant Investigations. L. H. DEWEY, *Botanist in charge.*

These investigations deal with the study of fiber plants likely to prove of value in the United States and the encouragement of fiber-plant industries.

Scientific staff.—Robert L. Davis, scientific assistant.

Drug-Plant, Poisonous-Plant, Physiological, and Fermentation Investigations. RODNEY H. TRUE and W. W. STOCKBERGER, *Physiologists in charge.*

This branch of the bureau studies the commercial culture of drug-producing crops and tea; stock-poisoning plants and methods of preventing the losses caused by them; and plant physiology and fermentation.

Scientific staff.—William Crocker, Heinrich Hasselbring, and Lon A. Hawkins, physiologists; Otis F. Black, Frank Rabak, and A. F. Sievers, chemical biologists; S. L. Jodidi, organic chemist; W. W. Eggleston, assistant botanist; T. B. Young, assistant agronomist; L. N. Smith and James Thompson, scientific assistants; Rodney B. Harvey, assistant pharmacologist; G. Archie Russell, expert; James W. Kelly, laboratory technician.

Cereal Investigations. MARK A. CARLETON, *Cerealist in charge.*

This work deals with the culture, adaptation, improvement, and uses of cereal crops, the prevention of diseases affecting cereals, the cultivation and breeding of flax for seed purposes, including a study of flax diseases, and the production and improvement of broom corn.

Scientific staff.—L. C. Aicher, Carleton R. Ball, C. E. Chambliss, H. V. Harlan, C. E. Leighty, and C. W. Warburton, agronomists; E. L. Adams, C. H. Clark, J. Mitchell Jenkins, and F. A. Kiene, jr., assistant agronomists; John B. Sieglinger, assistant agriculturist; H. B. Humphrey and Wm. H. Weston, jr., pathologists; A. A. Potter, assistant pathologist; John F. Ross and D. E. Stephens, farm superintendents; Olaf S. Aamodt, Ross R. Childs, J. C. Brinsmade, jr., J. A. Clark, N. C. Donaldson, V. H. Florell, C. W. Hunger-

ford, J. W. Jones, J. H. Martin, J. D. Morrison, Chas. S. Reddy, B. E. Rothgeb, F. J. Schneiderhan, R. W. Smith, T. R. Stanton, Theodore Stoa, and W. H. Tisdale, scientific assistants; L. R. Breithaupt, L. C. Burnett, W. T. Craig, G. R. Hoerner, A. G. Johnson, M. A. McCall, L. J. Stadler, and Horace M. Woolman, agents.

Corn Investigations. C. P. HARTLEY, *Physiologist in charge.*

These investigations are planned to determine the fundamental principles of corn improvement, adaptation, culture, and use that influence the quantity, quality, and profitability of corn production. They are conducted on the farms of interested corn growers throughout the United States, and the facts determined support the educational work with corn as conducted by corn clubs and demonstration agents.

Scientific staff.—Ernest B. Brown, physiologist; Curtis H. Kyle, assistant physiologist; J. G. Willier, Fred D. Richey, George J. Burt, H. Howard Biggar, Charles D. Bennett, Hugo Stoneberg, C. E. Trout, and Arthur A. Bryan, scientific assistants; J. M. Hammerley and H. S. Garrison, assistants.

Tobacco and Plant Nutrition Investigations. W. W. GARNER, *Physiologist in charge.*

The tobacco work has to do with the improvement of tobacco by hybridization and selection, the improvement of methods of growing and handling the crop, the combating of diseases, and the general study of the tobacco industry. Experiments and demonstrations in the growing of tobacco in rotation with farm crops are features of the work.

The plant-nutrition studies relate to some of the broad problems concerned in the growth and development of crop plants as affected by nutrition.

Scientific staff.—E. H. Mathewson and G. W. Harris, crop technologists; Otto Olson, E. G. Belnhart, D. E. Brown, W. M. Lunn, E. G. Moss, R. H. Milton James P. Young James O. Evans, J. E. McMurtrey, jr., and C. M. Slagg, assistants in tobacco investigations; Charles W. Bacon and H. A. Allard, assistant physiologists; Charles L. Foubert, scientific assistant; Charles S. Ridgway, assistant in botanical laboratory work; R. H. Hartman, agent.

Agricultural Technology. N. A. COBB, *Technologist in charge.*

These investigations deal with the improvement of technological methods in crop production; the measurement of cotton staple, technological ginning investigations, and studies of free-living and plant-infesting nematodes.

Scientific staff.—W. E. Chambers, technologist; Albert Mann, plant morphologist; Emil G. Arzberger, pathologist; M. L. Harrison, assistant in technology.

Paper-Plant Investigations. Directed by C. J. BRAND, *Chief Bureau of Markets.*

This work has to do with the testing of plants believed to be suitable for paper manufacture.

Scientific staff.—Jason L. Merrill, paper plant chemist; George A. Stuart, assistant in paper-plant investigations; Robert E. Lofton, assistant physicist.

Biophysical Investigations. LYMAN J. BRIGGS, *Biophysicist in charge.*

This office studies physical problems connected with the work of the Bureau of Plant Industry. Attention is chiefly directed at present to biophysical problems in dry-land agriculture, the water requirements and nutrition of crop plants, the influence of the physical environment on crop growth, and investigations in electroculture.

Scientific staff.—C. A. Jensen, assistant in plant malnutrition; J. O. Belz, assistant; R. H. Heald, C. J. King, and J. Z. Richardson, assistants in water requirements; James F. Breazeale, J. W. McLane, and Julia R. Pearce, laboratory assistants; A. B. Campbell, mechanical assistant.

Seed-Testing Laboratories. EDGAR BROWN, *Botanist in Charge.*

These laboratories are charged with the enforcement of the Seed Importation Act and also examine samples of commercial seeds for the presence of adulteration and conduct a general propaganda in the interest of pure seed for the farmer. The work is performed both in Washington, D. C., and at cooperative laboratories in the field.

Scientific staff.—F. H. Hillman and W. L. Goss, assistant botanists; George T. Harrington, Emma F. Sirls, Bertha C. Hite, Anna M. Lute, Helen H. Henry, Etta O. Gilbert, Grace M. Cole, Rachel E. Holmes, Mary L. Stott, Emma S. Doyle, Mayme Dworak, Edith C. Higgins, and Salome E. Comstock, scientific assistants; Ethel M. Pattison, laboratory aid.

Forage Crop Investigations. CHARLES V. PIPER, *Agrostologist in charge.*

The forage crop investigations include methods of production; development and dissemination of new valuable varieties; extension of forage crops into sections where they

are adapted but are grown only to a limited extent; and cooperation in the introduction and extension of new crops.

Scientific staff.—R. A. Oakley, A. J. Pieters, H. N. Vinall, Lyman Carrier, and Samuel M. Tracy, agronomists; Roland McKee, assistant agrostologist; P. L. Ricker, assistant botanist; M. W. Evans, W. J. Morse, A. B. Cron, H. R. Cates, Samuel Garver, R. W. Edwards, Robert E. Getty, L. W. Kephart, Leroy Moomaw, Harvey L. Westover, H. S. Coe, Hiram R. Reed, Albert Hansen, Charles E. Hill, H. A. Schoth, and Alma R. White, scientific assistants.

Alkali and Drought Resistant Plant Breeding Investigations. T. H. KEARNEY, *Physiologist in charge*.

This office investigates the alkali resistance of crop plants; develops, by breeding and selection, strains of field crops which will be more resistant to drought than the varieties now obtainable; and studies the physiology of drought resistance. The work is conducted in close cooperation with other branches of the bureau concerned with the upbuilding of agriculture in the West and Southwest.

Scientific staff.—H. L. Shantz and A. C. Dillman, physiologists; Phillip Norman Peter, and Clyde F. Griswold, scientific assistants; Walton G. Wells, assistant.

Economic and Systematic Botany. FREDERICK V. COVILLE, *Botanist in charge*.

This office maintains economic collections of cultivated plants and makes systematic studies of grasses and other economic plants, compiles information on native plants for publication, tests wild and little-known plants, and experiments with a view to the improvement of the grazing areas on the public lands.

Scientific staff.—A. S. Hitchcock, systematic agrostologist; W. E. Safford, economic botanist; Ivar Tidestrom, assistant botanist; Agnes Chase, scientific assistant.

Dry-Land Agriculture Investigations. E. C. CHILCOTT, *Agriculturist in charge*.

This office studies proper cultural methods for the growing of crops in the semiarid regions of the West, especially in that portion known as the Great Plains area. The objects are to determine the best methods of soil preparation and crop rotation for the conservation of moisture and the maintenance of humus in the soil.

Scientific staff.—J. S. Cole, agriculturist; W. A. Peterson, J. M. Stephens, O. J. Grace, W. D. Griggs, F. L. Kelso, J. E. Mundell, and E. F. Chilcott, farm superintendents; C. B. Brown, A. L. Hallsted, L. N. Jensen, Joseph B. Kuska, Joseph F. Brandon, Francis E. Cobb, Albert Osenbrug, Fay A. Wagner, W. P. Baird, H. J. Clemmet, Willard E. Lyness, O. R. Mathews, A. J. Ogaard, W. M. Osborn, M. Pfaender, J. T. Sarvis, H. G. Smith, R. S. Towle, J. C. Thysell, Leroy D. Willey, and Arthur E. Seamans, assistants; L. L. Zook, physiologist; G. W. Morgan, scientific assistant; Charles H. Ruzika, agent; Robert Wilson, and N. O. Henchel, assistants in dry-land arboriculture; H. G. Brenner, orchardist.

Western Irrigation Agriculture. C. S. SCOFIELD, *Agriculturist in charge*.

The work is concerned with the development of profitable agriculture on the lands to be placed under irrigation in the western United States, and also with the testing of various crops suited for growth under irrigation. The work is conducted in cooperation with a number of the investigational offices of the bureau.

Scientific staff.—F. B. Headley, assistant agriculturist; Beyer Aune, R. E. Blair, R. W. Allen, Daniel Hansen, and James A. Holden, farm superintendents; Ernest W. Curtis, scientific assistant; Clarence R. Lettner and Edward G. Noble, assistants in dry-land agriculture; George T. Ratcliffe, scientific assistant; C. E. Peterson, assistant in dry-land arboriculture; H. K. Dean, agriculturist, irrigated field crops.

Sugar-Plant Investigations. C. O. TOWNSEND, *Pathologist in charge*.

This office investigates all factors bearing upon the production and improvement of sugar plants, including a study of cultural methods, diseases, and the importation, selection, and breeding of varieties, as well as the proper handling and utilization of the raw material and of the by-products. It also studies the relation of the sugar crops, beet, cane, and sweet sorghum, to all other activities on the farm, including crop rotation, stock raising, labor, markets, etc., so far as these factors have any bearing upon the production and utilization of sugar plants and their by-products and upon the yield and quality of the finished products, sugar and sirup.

Scientific staff.—William H. Burns, assistant; Eubanks Carsner, assistant pathologist; Louis L. Corbett, assistant agriculturist; James W. Jones, agriculturist; Lewis E. Longley, scientific assistant; George F. Miles, pathologist; Samuel B. Nuckols, assistant agriculturist; E. C. Rittue, assistant; Caroline Rumbold, assistant pathologist; E. G. Titus, W. W. Tracy, jr., and P. A. Yoder, technologists.

Horticultural and Pomological Investigations. L. C. CORBETT, *Horticulturist in charge*.

These investigations have to do with the improvement of methods of producing, shipping, and storing perishable fruits, truck, and related crops; landscape and vegetable

gardening; floriculture and related subjects. The work is divided into fruit production, fruit utilization, viticulture, nut culture, pomological breeding, fruit history, fruit nomenclature and identification, truck crop production, vegetable breeding, landscape gardening, floriculture and miscellaneous horticultural investigations, potato investigations, fruit and vegetable transportation, and storage investigations in cooperation with the Bureau of Markets.

Scientific staff.—C. P. Close, H. P. Gould, George C. Husmann, E. R. Lake, and Leo B. Scott, pomologists; C. S. Pomeroy, assistant pomologist; Lon A. Hawkins, A. D. Shamel, and Walter Van Fleet, physiologists; Henry R. Kraybill, assistant physiologist; Charles E. Sando, junior chemist (biological); D. N. Shoemaker, William Stuart, F. L. Mulford, and H. C. Thompson, horticulturist; Fred E. Miller, assistant horticulturist; David Griffiths, agriculturist; W. F. Wight, botanist; Charles F. Clark, assistant agronomist; W. W. Tracy, sr., superintendent of testing gardens; C. A. Reed, nut culturist; James H. Beattie, Bernard Beckerman, Lois M. Clency, Margaret Connor, George M. Darrow, Charles T. Dearing, George W. Dewey, C. L. Dyer, W. F. Fletcher, P. M. Lombard, Lawrence J. Reid, Elmer Snyder, B. Szymoniak, Edw. D. Vosbury, scientific assistants; F. L. Husmann, viticultural superintendent; Justin F. Fernald, mechanical assistant.

Experimental Gardens and Grounds. E. M. BYRNES, *Assistant in charge.*

This office is charged with the care and ornamentation of the department grounds, the maintenance of greenhouses and plant collections, and the propagation of plants for experimental and other purposes. Experimental work with florists' crops is also being conducted in the greenhouses.

Congressional Seed Distribution.

This work consists of the securing, packing, and mailing of the quantities of vegetable, flower, and other seeds and plants necessary for congressional distribution, as well as the testing, propagation, and distribution of improved seeds of various crops.

Staff.—R. A. Oakley, agronomist in charge; Oliver F. Jones, executive assistant; J. E. W. Tracy, assistant superintendent of testing gardens.

Foreign Seed and Plant Introduction. DAVID FAIRCHILD, *Agricultural Explorer in charge.*

This office secures promising new seeds and plants, both by agricultural exploration and by correspondence, and these are tested at the plant introduction field stations or through cooperation with other offices, experiment stations, experimenters, and private individuals. Investigations in plant propagation and in the development of certain plant industries are features of the work.

Scientific staff.—P. H. Dorsett, plant introducer in charge of plant introduction field stations; Beverly T. Galloway, plant pathologist in charge of plant protection and propagation; Peter Bisset, plant introducer in charge of foreign plant distributions; Frank N. Meyer and Wilson Popenoe, agricultural explorers; H. C. Skeels, S. C. Stuntz, and R. A. Young, botanical assistants; Glen P. Van Eseltine, assistant in botanical laboratory work; P. G. Russell, scientific assistant; E. O. Orpet, D. A. Bisset, Harry Duffield, jr., and Robert N. Jones, assistants in plant introduction; Edward Goucher, plant propagator; Henry Y. Gouldman, and Louis S. Houghton, jr., laboratory aids; Robert L. Beagles, farm superintendent, in charge of plant introduction field station, Chico, Cal.; Edward Simmonds, garden and field station superintendent, in charge of plant introduction field station, Miami, Fla.; John M. Rankin, assistant farm superintendent, in charge of Yarrow plant introduction field station, Rockville, Md.; James E. Morrow, assistant superintendent of plant introduction field station, Brooksville, Fla.; Henry E. Juenemann, gardener, in charge of plant introduction field station, Bellingham, Wash.; and R. S. Atwater, M. E. Batchelor, H. A. Houser, M. H. Lee, F. R. Livingstone, B. L. Peters, E. J. Rankin, C. H. Steffani, and D. M. Wallen, field station aids.

Arlington Experimental Farm. Directed by L. C. CORBETT, *Horticulturist.*

The Arlington farm is the field laboratory at Washington for the Bureau of Plant Industry, as well as for other bureaus of the department. Widely varying field tests are conducted on the farm.

Staff.—E. C. Butterfield, assistant horticulturist in general charge; J. H. Criswell, assistant superintendent.

Demonstrations on Reclamation Projects. F. D. FARRELL, *Agriculturist in charge.*

This office conducts demonstration work with individual farmers and farmers' organizations on the Government reclamation projects, for the purpose of assisting in the establishment of specific agricultural industries suited to the conditions on these projects.

Scientific staff.—L. E. Cilne, Harry A. Ireland, Roy P. Bean, Carl Christopher, Don G. Magruder, E. F. Rinehart, Paul S. Jones, and Harry A. Lindgren, agriculturists; Charles S. Jones, assistant.

BUREAU OF CHEMISTRY.

[Those whose names are starred (*) are on furlough for military service.]

Chief, CARL L. ALSBERG; Assistant Chief, W. G. CAMPBELL; Chief Clerk, F. B. LINTON.

The Bureau of Chemistry is concerned primarily with questions of agricultural chemistry of public interest, the enforcement of the food and drugs act, analytical work, and investigations under the food and drugs act, and other chemical investigations referred to it by other branches of the Government service.

Detailed to chief.—R. T. Balch, M. Boyle, J. F. Brewster,* E. D. Clark, W. F. Clarke, W. D. Collins, P. B. Dunbar, G. S. Jamieson, A. J. Johnson, B. McClelland, G. H. Mains,* M. G. Martin,* W. E. Mathewson, A. S. Mitchell, J. C. Munch, H. E. Patten, S. H. Ross, H. Runkel, A. E. Taylor, E. T. Wherry, and R. R. Williams.

General Administration. A. E. DRAPER, *librarian*; K. A. SMITH, *editor*; J. G. COLEMAN and S. A. POSTLE, *executive clerks*.

State Cooperative Food and Drug Control. J. S. ABBOTT, *Chemist in charge*.

This office endeavors to promote close and cordial cooperation between State and Federal officials charged with the enforcement of all food and drug laws, works out policies for such cooperation, and seeks to unify and harmonize the work and policies of such officials.

Assistant.—W. C. Burnet.

Sherley Amendment Office. M. W. GLOVER, *Surgeon, U. S. P. H. S., in charge*.

This office has to do with the preparation of cases dealing with violations of the provisions of the Sherley amendment.

Assistants.—M. Cooley, A. J. McIntyre, and T. C. Merrill.

Animal Physiological Chemical Laboratory. F. C. WEBER, *Chemist in charge*.

The work in this laboratory includes metabolism and feeding experiments with foods, organic and inorganic compounds, and various carbohydrates; a complete study of the application of chemical methods to the determination of deterioration of animal foods; investigations in the canning of sardines and other marine products; and experimental work to improve the methods of analysis ordinarily employed in physiological chemistry.

Scientific staff.—D. H. Grant, H. W. Houghton, and J. B. Wilson, assistants.

Carbohydrate Laboratory. C. S. HUDSON, *Chemist in charge*.

This laboratory analyzes sugars, sirups, molasses, honeys, jellies, jams, preserves, infant foods, confectionery, and similar substances in connection with the enforcement of the food and drugs act. Analyses are also made of all samples of sugars, starches, sirups, and molasses bought by the General Supply Committee. The laboratory investigates the manufacturing processes used in the production of raw and refined sugar and molasses, maple sugar, sirups from cane, maple, and sorghum, and confectionery and jellies. Improved methods of chemical analysis are studied, and also the characteristic constants by which pure carbohydrates are distinguished.

Scientific staff.—L. H. Chernoff, J. K. Dale, C. A. Dyer,* T. S. Harding, F. B. La Forge, K. P. Monroe, S. F. Sherwood, and M. N. Straughn, assistants.

Color Investigation Laboratory. H. D. GIBBS, *Chemist in charge*.

The various projects on the study of color substances which have been in progress in this bureau for some time are concentrated in this laboratory.

Scientific staff.—E. Q. Adams, J. A. Ambler, G. S. Bohart, C. Conover, A. M. Doyle, H. F. Lewis, H. A. Lubs, and R. C. Young, assistants.

Drug Division. L. F. KEBLER, *Chief*.

This division studies the properties, composition, and quality of drugs and medicinal preparations, and analyzes samples of such products taken in the enforcement of the food and drugs act. It also studies methods which may lead to more satisfactory analytical processes, especially for testing potent plant drugs and products derived from them.

Scientific staff.—D. K. Brauns, H. E. Buchbinder, W. H. Heath, W. F. Kunke, and S. Palkin, assistants. Synthetic drug products laboratory: W. O. Emery, chief; C. D. Wright, assistant. Essential oil laboratory: E. K. Nelson, chief.

Food Control Laboratory. I. K. PHELPS, *Chemist in charge*.

The food control laboratory supervises the inspection of food products (not including cattle feeds) under the food and drugs act. This work includes the examination of analytical reports on official food samples, the consideration of cases prepared for cita-

tion or prosecution, handling of correspondence relating to cases, and to general questions arising under the food and drugs act as they relate to these products. Special studies are also made of the manufacture and production of food products, the analysis of dairy products, the analysis of flour, the bleaching of flour, the analysis of some fermented food products, and the identification of some of the products of fermentation in such food products.

Scientific staff.—H. W. Daudt, O. L. Evenson, L. W. Ferris, M. J. Ingle, B. R. Jacobs, J. T. Keister, H. A. Lepper, W. T. McGeorge, H. S. Paine, H. E. Palmer, J. I. Palmore, O. S. Rask, D. D. Reavis, jr., E. E. Smith, C. G. Sutton, and E. L. P. Treuthardt, assistants.

Food Investigation Laboratory. R. W. BALCOM, *Acting Chemist in charge.*

This laboratory conducts investigations that are necessary as a basis for the regulatory work in food control. At the present moment the following problems are under investigation: The composition of commercial generator vinegar and the changes taking place in the conversion of cider into vinegar; the exact determination of the heavy metals in foods; some essential oils and synthetic flavors and flavoring extracts prepared therefrom; gelatin.

Scientific staff.—E. G. Grab, C. R. Smith, and E. Yanovsky, assistants.

Fruit and Vegetable Utilization Laboratory. H. C. GORE, *Chemist in charge.*

This laboratory is investigating the utilization of surplus and cull fruits and vegetables. At present the drying of vegetables and fruits and the utilization of potatoes and sweet potatoes are receiving the most attention. Much of this work is in cooperation with the Bureau of Plant Industry.

Grain Dust Explosion Investigations. D. J. PRICE, *Engineer in charge.*

Investigations are made of the causes of grain-dust explosions in threshers, mills, and elevators with the view of determining the most effective means of preventing such explosions. The work is done in cooperation with the Office of Public Roads and Rural Engineering, the Bureau of Markets, and the Bureau of Plant Industry, the Bureau of Mines, Department of the Interior, and Pennsylvania State College.

Scientific staff.—H. H. Brown, H. R. Brown, and W. B. Mather, assistants.

Leather and Paper Laboratory. F. P. VEITCH, *Chemist in charge.*

This laboratory conducts investigations of tannins and tanning materials, their effects upon the strength and properties of leather, and processes involved in their production; problems relating to the production of leather; the qualities of papers and their fitness for use in the Department of Agriculture and other departments of the Government which may request such investigations; the production of paper; the nature and uses of turpentine and resins, together with improved processes of production; the destructive distillation of wood and methods of improving the quality and quantity of the products; the grading, weighing, and handling of naval stores, and preparation of definite type samples therefor; and the water and mildew proofing of fabrics and of leather. Turpentine and rosin are examined under the food and drugs act. Papers, leathers, turpentine, resins, and textiles are examined for the departments of the Government requesting such work, and specifications are prepared for the purchase of these articles.

Scientific staff.—I. D. Clarke, R. W. Frey, V. E. Grottsch, H. P. Holman, B. S. Levine, E. O. Reed, and R. E. Sayre, assistants.

Microbiological Laboratory. CHARLES THOM, *Mycologist in charge.*

This laboratory consists of a research section and a regulatory section and works upon the relation of molds and bacteria to food products. Its research projects cover studies of yeasts, oysters, sauerkraut, canned goods, deterioration of cereal products and of forage, classification and activities of bacteria and molds, and the development and standardization of methods applicable to biological inspection work. Its regulatory staff conducts the bacteriological inspection of milk, oysters, gelatin, table waters, tomato products, canned foods, miscellaneous inspection samples in which spoilage is suspected, and samples submitted by the Insecticide and Fungicide Board.

Scientific staff.—V. Birekner, M. B. Church, G. G. De Bord, E. Lefevre, P. B. Parsons, H. W. Redfield, and L. A. Round, assistants.

Microchemical Laboratory. B. J. HOWARD, *Microscopist in charge.*

This laboratory makes microscopical and microchemical studies of foods, drugs, cattle feed, paper and textile materials, miscellaneous agricultural products, etc. It also makes microscopical examinations of insecticides and studies methods for their microscopical identification and estimation. Special attention is given to the histological study of fruits, spices, cereals, starches, and other agricultural products for the purpose of perfecting methods for detecting the adulteration of these products.

Scientific staff.—G. L. Keenan, M. A. Lyons, W. K. Makemson, E. A. Read, B. H. Silberberg, and C. H. Stephenson, assistants.

Miscellaneous Division. J. K. HAYWOOD, *Chief.*

This division comprises the insecticide and fungicide laboratory, a cattle food and grain investigation laboratory, and a trade wastes laboratory, and studies insecticides and fungicides, cattle foods, forage crops, grains, trade wastes, and certain hygienic problems, making analyses under the food and drugs act and the insecticide act, and performing such miscellaneous chemical work as may be referred to it. This division makes cooperative investigations of insecticides and fungicides for the Bureau of Entomology and Plant Industry and is engaged, with the latter bureau, in a number of cooperative studies of grain and forage crops. Much time is given to the investigation of new methods of analysis of insecticidal and fungicidal materials and to chemical investigations of insecticides and fungicides.

Scientific staff.—Cattle food and grain investigation laboratory: G. L. Bidwell, chemist in charge; C. E. Goodrich, J. B. Reed, and G. P. Walton, assistants. Insecticide and fungicide laboratory: C. C. McDonnell, chief; N. H. Borden,* F. C. Cook, R. Elmer, J. J. T. Graham, E. L. Griffin, O. D. Knight, W. E. Kuentzel, W. D. Lynch, L. N. Markovitz,* W. J. Morgan, E. J. Nealon, G. O. Oberhelman, R. C. Roark, L. P. Shippen, C. M. Smith, M. L. Somerville, and C. B. Stone, assistants. Trade wastes laboratory: Under J. K. Haywood, chief.

Nitrogen Laboratory. ———, *Chemist in charge.*

Nitrogen determinations for all laboratories of this bureau, as well as for many of the other bureaus of the department, are made in the nitrogen laboratory. Work in cooperation with the Association of Official Agricultural Chemists is also done, looking to the improvement of the methods for making these determinations.

Oil, Fat, and Wax Laboratory. H. S. BAILEY, *Chemist in charge.*

This laboratory analyzes oils, fats, cooking compounds, chocolates, nut butters, and similar substances in connection with the enforcement of the food and drugs act. It studies the chemical composition of American food oils, fats, and hydrogenated compounds, and carries on investigations in the production of such products.

Scientific staff.—J. M. Johnson, assistant.

Pharmacognosy Laboratory. A. VIEHOEVER, *Pharmacognosist in charge.*

This laboratory supervises the inspection of crude drugs under the food and drugs act. It investigates the chemical, histological, and morphological characteristics of drugs and plants. It works on the improving of methods of drug analysis and on the establishing of standards for drugs and other plant products.

Scientific staff.—J. F. Clevenger, C. O. Ewing, and E. E. Stanford, assistants.

Pharmacological Laboratory. W. SALANT, *Pharmacologist in charge.*

This laboratory makes researches on the physiological action of poisonous substances occurring in food products and of drugs used in medicine, and physiological tests of drugs to ascertain the strength and purity of medicinal preparations found in the open market.

Scientific staff.—H. Connet, E. A. Hudon, and E. W. Schwartz, assistants.

Phytochemical Laboratory. F. B. POWER, *Chemist in charge.*

The purpose of this laboratory is to subject plants and vegetable drugs to a complete chemical investigation, with special consideration of such constituents as may represent their physiological activity. It thus endeavors to ascertain the possible utilization of various plants or their active principles as therapeutic agents, and also to facilitate the detection of drugs in such medicinal preparations or other products as are subject to surveillance under the food and drugs act.

Scientific staff.—V. K. Chesnut, assistant.

Plant Chemical Laboratory. J. A. LE CLERC, *Chemist in charge.*

The plant chemical laboratory studies the chemistry of plants, with respect especially to climate and environment, both in the greenhouse and in the field; changes taking place in grain during germination, malting, and storage; and milling and breadmaking. Work is also done in collaboration with the Bureau of Plant Industry on problems connected with plant physiological chemistry.

Scientific staff.—L. H. Bailey, J. Davidson, C. D. Garby, K. J. Osterhout, and E. Working, assistants.

Protein Investigation Laboratory. C. O. JOHNS, *Chemist in charge.*

This laboratory investigates and analyzes the proteins which occur in seeds and other vegetable substances used as foods. At present the proteins of the peanut, the velvet

bean, coconut, buckwheat, and kafir are under investigation. The purpose of these researches is to ascertain the nutritive value of the various proteins. Feeding experiments are conducted in cooperation with the Bureau of Animal Industry. Experimental work is also done to improve the methods used in the preparation and analysis of proteins.

Scientific staff.—A. J. Finks and D. B. Jones, assistants.

Water Laboratory. W. W. SKINNER, *Chemist in charge.*

This laboratory studies the composition of waters, brines, salts, and nonalcoholic beverages, and analyzes samples of such products taken in the enforcement of the food and drugs act. It investigates sanitary and technical problems relating to the production of bottled waters, nonalcoholic beverages, and related products.

Scientific staff.—C. H. Badger, W. F. Baughman, F. B. Furber, and J. W. Sale, assistants.

Field Investigation Service.

Citrus By-Products Laboratory. E. M. CHACE, *Chemist in charge.*

This laboratory directs its attention to devising methods for the utilization of cull oranges and lemons. With this in view, methods are being studied for the manufacture of citric acid, oils of lemon and of orange, concentrated orange juice, and orange vinegar. It conducts investigations relating to the maturity of fruits and vegetables.

Scientific staff.—C. G. Church, F. E. Denny, and H. D. Poore, assistants.

Food Research Laboratory. M. E. PENNINGTON, *in charge.*

The food research laboratory makes chemical, bacteriological, and histological studies of foods preserved by low temperatures. Milk, poultry, eggs, and fish have been the objects of investigation, with reference to their decomposition and putridity during preparation, transportation, storage, and marketing, in connection with the food and drugs act. A special investigation of frozen and dried eggs and egg products has been carried on, chiefly in the egg-breaking establishments, and with the cooperation of the industry; a similar investigation of fish, both fresh and frozen, is now being conducted.

Scientific staff.—H. C. Bowman, A. D. Greenlee, L. E. Harker, E. C. Heinsohn, J. S. Hepburn, H. R. Hill, G. D. Horton, M. K. Jenkins, E. F. Kohman, C. C. Le Febvre, H. A. McAleer, H. C. Pierce, C. E. Sidler, R. L. Skinner, G. C. Swan, E. Witmer, and H. E. Woodward, assistants.

Field Regulatory Service.

Food and Drug Inspection.

The country has been divided into three food and drug inspection districts, Eastern, Central, and Western, each with a chief in charge, who has immediate supervision of the branch stations and the inspectors within his district. The eastern inspection district (B. R. Hart,¹ New York, N. Y.), includes the stations in Boston (E. J. Shanley²), Buffalo (W. A. Bender²), New York (A. F. Seeker²), Philadelphia (A. Stengel²), San Juan (J. A. MacLaughlin²), Savannah (H. H. Wagner²), and Washington (A. L. Sullivan²). The central inspection district (R. E. Doolittle,¹ Chicago) includes the stations in Chicago (G. W. Hoover²), Cincinnati (L. B. Forst²), Minneapolis (H. H. Walters²), New Orleans (F. W. Liepsner²), and St. Louis (W. R. M. Wharton²). The western inspection district (R. W. Hiltz,¹ San Francisco) includes the stations in Denver (R. S. Hiltner²), Honolulu (A. W. Hansen²), San Francisco (—————²), and Seattle (W. Vincent²). There is a corps of 47 food and drug inspectors in the field. The taking of samples for analysis constitutes their chief duty, though special investigations in collaboration with the chemists are also made, and factories are inspected in which food and drugs are prepared. Examinations of samples are made for other branches of the Government service as may be necessary.

State Officials Authorized to Collect Samples Under the Food and Drugs Act.

Alabama.—J. A. Wade, Commissioner of Agriculture and Industries, Montgomery. *Arizona.*—Charles A. Meserve,¹ Director of State Laboratory, University of Arizona, Tucson. *Arkansas.*—J. H. Page, Commissioner of Mines, Manufactures, and Agriculture, Little Rock. *California.*—E. J. Lea, University of California, Berkeley. *Colorado.*—S. R. McKelvey, Food and Drug Commissioner, State Board of Health, Capitol Building, Denver. *Connecticut.*—Frank H. Stadtmueller, Dairy and Food Commissioner, Capitol Building, Hartford. *Delaware.*—A. E. Frantz, State Board of Health, Wilmington. *District of Columbia.*—George M. Roberts, Department of Weights, Measures, and Markets, Washington; William C. Woodward, Health Department, Washington. *Florida.*—W. A. McRae, Commissioner of Agriculture, Tallahassee. *Georgia.*—J. J. Brown, Commissioner of Agriculture, Department of Agriculture, Atlanta. *Hawaii.*—M. B. Pairoso,

¹ Chief.

² Chief of station.

Deputy Food Commissioner, Honolulu. *Idaho*.—John K. White, Dairy, Food, and Sanitary Commissioner, Boise. *Illinois*.—J. B. Newman, Superintendent of Foods and Dairies, Food Commission, 1627 Manhattan Building, Chicago. *Indiana*.—H. E. Barnard,¹ State Board of Health, Statehouse, Indianapolis. *Iowa*.—W. B. Barney, Dairy and Food Commission, Des Moines. *Kansas*.—S. J. Crumblin, State Board of Health, Topeka; L. A. Filtz,² State Agricultural College, Manhattan. *Kentucky*.—J. D. Turner,² Agricultural Experiment Station, Lexington. *Louisiana*.—Oscar Dowling, State Board of Health, New Orleans; Harry D. Wilson,² Department of Agriculture and Immigration, Baton Rouge. *Maine*.—J. A. Roberts, Commissioner of Agriculture, Augusta. *Massachusetts*.—Allan J. McLaughlin, Commissioner of Health, Boston; Philip H. Smith,² Agricultural Experiment Station, Amherst. *Michigan*.—F. L. Woodworth, Dairy and Food Commissioner, Lansing; A. J. Patten,² Agricultural Experiment Station, East Lansing. *Minnesota*.—J. Sorensen, Dairy and Food Commissioner, new capitol, St. Paul. *Mississippi*.—W. F. Hand,¹ Agricultural and Mechanical College, Agricultural College. *Missouri*.—E. L. Barnhouse, Food and Drug Commissioner, La Salle Building, St. Louis. *Montana*.—W. F. Cogswell, Department of Public Health, Helena. *Nebraska*.—Otto Murschel, Food, Drug, Dairy, and Oil Commission, Lincoln. *Nevada*.—Sanford C. Dinsmore,¹ Agricultural Experiment Station, Reno. *New Hampshire*.—Irving A. Watson, State Board of Health, Concord. *New Jersey*.—C. S. Cathcart, Agricultural Experiment Station, New Brunswick; R. B. Fitz-Randolph,¹ State Board of Health, Trenton. *New York*.—Chas. S. Wilson, Commissioner of Agriculture, Albany. *North Carolina*.—W. A. Graham, Commissioner of Agriculture, Raleigh. *North Dakota*.—Edwin F. Ladd,¹ Agricultural Experiment Station, Agricultural College. *Ohio*.—T. C. Gault, Board of Agriculture, Dairy and Food Division, Columbus; S. K. Johnson,² Board of Agriculture, Columbus. *Oklahoma*.—John W. Duke, Department of Public Health, Oklahoma City; F. M. Gault,² Board of Agriculture, Oklahoma City. *Oregon*.—J. D. Mickle, Dairy and Food Commission, 510 Worcester Building, Portland. *Pennsylvania*.—James Foust, Department of Agriculture, Harrisburg. *Porto Rico*.—W. F. Lippitt, Commissioner of Health, San Juan. *Rhode Island*.—F. A. Jackson, Room 21, Statehouse, Providence. *South Carolina*.—A. C. Summers, Department of Agriculture, Commerce and Industries, Columbia. *South Dakota*.—Guy G. Frary, Department of Food and Drugs, Vermillion. *Tennessee*.—H. L. Eskew, Department of Food and Drugs, Nashville; H. K. Bryson,² Commissioner of Agriculture, Nashville. *Texas*.—R. H. Hoffman, jr., Food and Drug Department, Austin; B. Youngblood,² Agricultural Experiment Station, College Station. *Utah*.—W. M. Boyden, Dairy and Food Commissioner, Salt Lake City. *Vermont*.—Charles F. Dalton, State Board of Health, 184 Church Street, Burlington. *Virginia*.—Benj. L. Purcell, Department of Agriculture and Immigration, Richmond. *Washington*.—E. F. Benson, Commissioner of Agriculture, Olympia. *Wisconsin*.—C. P. Norgord, Commissioner, Department of Agriculture, Madison. *Wyoming*.—Maurice Groshon, Dairy, Food, and Oil Department, Cheyenne.

BUREAU OF SOILS.

Soil Physicist and Chief of Bureau, MILTON WHITNEY; *Chief Clerk*, A. G. RICE.

The Bureau of Soils investigates the relation of soils to climate and organic life; studies the texture and composition of soils in field and laboratory; and maps and classifies the soils in selected areas in the different parts of the country.

The bureau prepares annually the report of the Field Operations of the Bureau of Soils, which contains a detailed description of the soils and of the agricultural conditions of the various areas surveyed, points out the present use of the soils, and discusses possible changes in crops and methods of cultivation. Large-scale lithographic maps showing the distribution of the different kinds of soils accompany each report.

The bureau investigates domestic fertilizer resources, and carries on work looking to improvement in the methods of fertilizer manufacture, and to the discovery of new materials or new combinations of materials for use in fertilizers.

Soil Chemical Investigations. E. C. SHOREY, *Scientist in charge*.

Chemical laboratories are maintained for the investigation of the composition of soil types, the nature and occurrence of soil minerals, the composition of the soil solution, and the properties of soils in their relation to origin, texture, and productiveness. Routine chemical work in connection with the Soil Survey and other divisions of the bureau and other offices and bureaus of the department is also carried on.

Scientific staff.—M. S. Anderson, W. H. Fry, R. F. Gardiner, William Hazen, H. P. Magnuson, C. F. Miller, W. B. Pope, J. G. Smith, and L. A. Steinkoenig.

Soil Physical Investigations. R. O. E. DAVIS, *Scientist in charge*.

In the physical laboratories investigations of the properties of the soil are carried on and a study made of their economic bearing; the moisture relations, aeration, heat con-

¹ Authorized to collect samples by virtue of appointment as collaborating chemist.

² Authorized to collect samples of feeds and feeding stuffs.

ductivity, texture, and other physical properties are investigated in their relation to soil productivity; mineralogical and mechanical analyses are made of soil types for the Soil Survey parties; and apparatus for field parties and for other divisions of the bureau is constructed and tested.

Scientific staff.—L. H. Greathouse, J. B. Kershaw, H. E. Middleton, L. B. Olmstead, and W. B. Page.

Investigations of Fertilizer Resources. FREDK. W. BROWN, *in charge*.

Investigations are made into the fertilizer resources of the United States with a view to discovering new sources of fertilizer materials and to utilizing for fertilizer many waste products; improvement in existing methods of manufacture and the study of new methods are carried out.

Scientific staff.—F. C. Binnall, J. W. Bomboy, H. Bryan, J. N. Carothers, W. C. Crandall, C. J. Crawley, C. C. Fletcher, T. R. Le Compte, A. R. Merz, W. H. Ross, J. P. Schroeder, E. B. Smith, G. C. Spencer, T. B. Turley, J. W. Turrentine, W. H. Waggaman, Cary R. Wagner.

Soil Survey Investigations. CURTIS F. MARBUT, *Scientist in charge*.

The work of the Soil Survey includes the study of the field characteristics of soils, the formulation of definitions and descriptions for individual soil types on the basis of their field characteristics, the identification of the various soil types thus defined, and the determination of their distribution, area, relationships, and agriculture in the United States. The work is carried on mainly by the detailed study of small unit areas such as counties and experiment-station farms, in many cases in cooperation with various State organizations.

Scientific staff.—Inspectors: Southern division, H. H. Bennett and W. E. Hearn; Northern division, W. E. McLendon and T. D. Rice; Western division, M. H. Lapham. Soil specialists: J. A. Bonsteel and J. E. Lapham. Soil surveyors: J. H. Agee, A. C. Anderson, Mark Baldwin, Miles W. Beck, R. T. A. Burke, T. M. Bushnell, E. J. Carpenter, W. T. Carter, jr., W. B. Cobb, L. V. Davis, C. E. Deardorff, E. B. Deeter, J. E. Dunn, E. C. Eckmann, E. D. Fowler, H. V. Geib, W. J. Geib, A. L. Goodman, E. C. Hall, H. W. Hawker, Frank A. Hayes, F. Z. Hutton, G. B. Jones, R. C. Journey, N. M. Kirk, E. W. Knobel, A. E. Kocher, W. J. Latimer, H. G. Lewis, M. Y. Longacre, C. Lounsberry, R. W. McClure, E. T. Maxon, A. H. Meyer, C. N. Mooney, T. M. Morrison, H. C. Mortlock, G. W. Musgrave, A. M. O'Neal, jr., A. L. Patrick, S. W. Phillips, W. A. Rockie, R. F. Rogers, L. R. Schoenmann, E. H. Smies, H. C. Smith, J. M. Snyder, Edmund H. Stevens, A. T. Strahorn, A. T. Sweet, A. E. Taylor, W. E. Tharp, B. W. Tillman, E. S. Vanatta, C. Vanduyne, J. O. Veatch, W. I. Watkins, E. B. Watson, and R. A. Winston.

BUREAU OF ENTOMOLOGY.

Entomologist and Chief of Bureau, L. O. HOWARD; *Entomologist and Assistant Chief of Bureau*, C. L. MARLATT; *Chief Clerk and Executive Assistant*, E. B. O'LEARY; *In charge of Library*, MABEL COLCORD; *Entomologist in Extension Work*, J. A. HYSLOP.

The Bureau of Entomology studies insects with special reference to methods of control, experiments with the introduction of beneficial insects, makes tests with insecticides and insecticide machinery, and identifies insects sent in by inquirers. Field laboratories are located throughout the country.

Southern Field Crop Insect Investigations. W. D. HUNTER, *Entomologist in charge*.

These investigations deal with insect pests of cotton, tobacco, sugar cane, and rice, and are planned to reveal practical methods of control. Special attention is given to the Mexican cotton-boll weevil and its parasitic enemies. An investigation of the Argentine ant is included.

Scientific staff.—W. D. Pierce, A. C. Morgan, entomologists, Southern field crop insect investigations; T. E. Holloway, G. D. Smith, B. R. Coad, S. E. Crumb, J. D. Mitchell, Henry Fox, entomological assistants; J. A. Nelson, expert; G. F. White, specialist in insect diseases; E. A. McGregor, R. W. Moreland, J. U. Gilmore, T. F. McGehee, Frank S. Chamberlin, Max Kisliuk, jr., and K. B. McKinney, scientific assistants; Torbert Slack, Floyd F. Bondy, Tom P. Cassidy, Gwynn L. Garrison, H. W. Lee, G. W. Luster, E. S. Tucker, W. B. Williams, and M. T. Young, cotton entomologists.

Cereal and Forage Insect Investigations. W. R. WALTON, *Entomologist in charge*.

The range caterpillar, the clover and alfalfa seed chalcid fly, wireworms, the corn leaf-aphis and the corn root-aphis, the alfalfa weevil, the fall army worm, the Hessian fly, the alfalfa gall midge, the southern corn leaf-beetle, false wireworms, the alfalfa

caterpillar, the chinch bug, white grubs, the western army cutworm, jointworms, the southern corn rootworm, the cowpea curculio, and the clover and alfalfa root curculio are among the objects of these investigations. Seventeen field stations in cooperation with the farmer are distributed over the United States. Thus insects involved in the injury of all cereal and forage crops are investigated from an economic point of view throughout the entire area of distribution. In this way it is practicable to investigate any insect as affected by every variation of condition under which the farmer is obliged to contend with it in his own fields. Investigations are carried out as far as possible in the fields of the farmer, who is thus enabled to see what is being done.

Scientific staff.—G. I. Reeves, W. J. Phillips, J. J. Davis, C. N. Ainslie, J. M. Aldrich, A. B. Gahan, V. L. Wildermuth, T. D. Urbahn, G. G. Ainslie, Philip Luginbill, R. A. Vickery, and P. B. Miles, entomological assistants; W. R. McConnell, C. W. Creel, D. J. Caffrey, A. F. Satterthwait, L. P. Rockwood, T. R. Chamberlin, W. H. Larrimer, C. M. Packard, C. F. Turner, T. S. Wilson, A. H. Beyer, E. L. Barrett, W. T. Emery, C. C. Hill, W. E. Pennington, P. R. Myers, R. J. Kewley, L. J. Bower, J. S. Wade, L. J. Hogg, J. M. Langston, W. B. Turner, W. B. Cartwright, A. L. Ford, H. J. Hart, J. R. Horton, M. C. Lane, F. W. Poos, D. A. Ricker, and R. H. Van Zwailenburg, scientific assistants. C. W. Curtin, H. M. Fort, C. H. Gable, Scott Johnson, M. E. Kimsey, H. B. Parks, H. L. Seamans, A. H. Sherwood, C. F. Stiles, and E. V. Walter, special field agents employed under food production act.

Deciduous-Fruit Insect Investigations. A. L. QUAINANCE, *Entomologist in charge.*

Insects injurious to orchards, vineyards, and nut trees are studied in this work. Field laboratories are maintained in important fruit-growing regions, as in Pennsylvania, Michigan, Colorado, New Mexico, California, Florida, Virginia, and Washington State. Experiments in the use of insecticides and spraying apparatus are made. The important projects include: Investigations of apple insects, as the codling moth, apple borers, and apple aphids; investigations of peach insects, as the peach borer, plum curculio, etc.; investigations of grape insects, as the grape Phylloxera, grape-berry moth, and miscellaneous grape insects; and investigations of nut insects, as those affecting the pecan and chestnut. Other projects are: Cranberry and small-fruit insect investigations; investigations of orchard insecticides and spraying machinery; control of deciduous-fruit insects by natural agencies; and deciduous-fruit nursery insect investigations.

Scientific staff.—E. W. Scott,¹ F. E. Brooks, J. B. Gill, A. C. Baker, R. L. Nougaret, G. A. Runner, J. J. Culver, R. A. Cushman, H. B. Scammell, E. B. Blakeslee, W. B. Wood, E. H. Siegler, J. H. Paine, and F. L. Simanton, entomological assistants; Alden T. Speare, mycoentomologist, Deciduous Fruit Insect Investigations; N. E. McIndoo, insect physiologist, Deciduous Fruit Insect Investigations; M. A. Yothers, specialist in apple insect investigations; W. S. Abbott,¹ E. J. Newcomer, W. M. Davidson, A. J. Ackerman, R. J. Fiske, J. E. Dudley, jr.,¹ Dwight Isely, A. I. Fabis, H. J. Ingerson, H. K. Plank, B. R. Leach, W. O. Ellis, B. A. Porter, E. R. Selkregg, J. D. Smith, W. D. Whitcomb, and R. W. McKeown, scientific assistants; W. R. Martin, J. M. Robinson, R. M. Fulton, C. C. Hamilton, W. J. Price, J. S. Stanford, and O. I. Snapp, special field agents employed under Food-Production Act.

Tropical and Subtropical Fruit Insect Investigations. C. L. MARLATT, *Entomologist and Assistant Chief of Bureau, in charge.*

Insects affecting all tropical and subtropical fruits are subjects of research, including those affecting the various species of citrus, olive, figs, etc., and greenhouse pests. The principal methods of control are investigated, namely, fumigation with hydrocyanic-acid gas, trapping, and spraying with contact and poison insecticides. The important projects include: Citrus-fruit insect investigations in California, citrus-fruit insect investigations in Florida, investigations of the Argentine ant in relation to citrus fruits, investigations of insects affecting tropical and subtropical plants in greenhouses, and investigations of miscellaneous subtropical insects.

Scientific staff.—R. S. Woglum, and W. W. Yothers, entomological assistants; E. R. Barber and A. D. Borden, scientific assistants; E. R. Sasser, H. L. Sanford, D. G. Tower, and H. L. Morrison, collaborators; Harry D. Young, special field agent employed under Food-Production Act.

Investigations of the Mediterranean and Other Fruit Flies. C. L. MARLATT, *Entomologist and Assistant Chief of Bureau, in charge.*

Investigation and control, in cooperation with the Federal Horticultural Board, of the Mediterranean and other fruit flies.

¹ Employed in "Enforcement of insecticide act."

Determination of the geographical distribution and importance of fruit-fly enemies of cultivated fruits as a basis for adequate quarantine or regulatory action, including studies of life history, means of artificial control, and control through the introduction and distribution of natural enemies. The important projects include: Control of export Hawaiian fruit, control of foreign fruit offered for entry, investigations of foreign fruit offered for entry, and geographical-distribution and life-history studies of fruit flies.

Scientific staff.—C. E. Pemberton, scientific assistant; H. F. Willard, fruit-fly quarantine inspector; Harold Morrison, entomological explorer; W. M. Mann, specialist in ants; G. F. Mozzette, entomological inspector.

Truck-Crop Insect Investigations. F. H. CHITTENDEN, *Entomologist in charge.*

Determination of the usual field experimental and research methods of the cause, extent, and character of insect injury, to determine methods of effective, preventive, and control measures to vegetable and truck-crop production, including insects affecting the potato, sweet potato, cabbage and other cole crops, beans, peas, and other leguminous food crops, tomato, onion, melons, cucumber and other cucurbits; with especial attention to the Colorado potato beetle, potato tuber moth, potato aphid, potato stalk weevil, potato flea-beetles, onion thrips, bean ladybird, bean aphid and pea aphid, cabbage worms and loopers, root maggots, cabbage and spinach plant lice, melon aphid, cutworms, wireworms, grasshoppers, blister beetles; insects injurious to greenhouse vegetables and certain miscellaneous crops; determination of life history of sugar-beet infesting insects such as leafhoppers, root-aphid, sugar-beet wireworms, false chinch bug, leaf-beetles, white grubs, and other pests, and studies of the agency of insects in the transmission of cucumber and melon wilt and mosaic, potato blight, and wilt "calico" of tomatoes, white smut of spinach, curly-top of sugar beets, anthracnose of beans, asparagus rust, and similar diseases.

Scientific staff.—C. H. Popenoe, T. H. Jones, M. M. High, F. A. Johnston, D. E. Fink, and J. E. Graf, entomological assistants; H. O. Marsh, C. F. Stahl, F. R. Cole, R. E. Campbell, C. E. Smith, F. M. Wadley, and M. R. Smith, scientific assistants; N. F. Howard, specialist in insects as carriers of plant diseases; W. N. Dovenor, expert; E. P. Barrios, K. L. Cockerham, S. W. Frost, H. N. Gellert, H. J. Ryan, O. K. Courtney, Q. S. Lowry, and R. C. Pickett, special field agents employed under the food-production act.

Stored-Product Insect Investigations. E. A. BACK, *Entomologist in charge.*

Studies of both common and newly introduced insects injuriously affecting stored wheat, corn, oats, and other grains and flour, meal, and other mill products, including all cereal foodstuffs in flour mills, elevators, and warehouses, involving special investigation of railway and steamboat lines as carriers of infestation; study of the insect enemies of dried fruits and nuts, beans, peas, and cowpeas, and cured meats, hides, furs, and manufactured fabrics; and investigation and demonstration of appropriate measures for the control of such insects, including tests of promising and standard fumigants and other insecticides against these species, and of kiln-drying and heat methods against grain pests, especially grain weevils, and of those attacking edible legumes.

Scientific staff.—F. B. Milliken and A. B. Duckett, scientific assistants.

Forest Insect Investigations. A. D. HOPKINS, *Forest Entomologist in charge.*

Investigations are conducted in the field and laboratory of the scientific and economic problems in connection with insects affecting forest, shade, and ornamental trees and hardy shrubs and forest products, with an ultimate view to the development and perfection of practical methods of control and prevention. These investigations include studies of beneficial as well as destructive insects as they affect such trees and shrubs in life and in all subsequent stages of use. Permanent field stations are distributed in the principal forested areas of the country, to serve as headquarters and centers of their respective districts, for the investigation of local insect problems. Demonstrations of practical control methods are undertaken through correspondence with, or direct supervision of, private individuals or officers in charge of forests, woodlots, parks, or city shade trees and ornamental shrubs.

Scientific staff.—J. M. Miller (in charge of Pacific Slope Station at Ashland, Oreg.), assistant forest entomologist; H. E. Burke (in charge of Forest Insect Laboratory at Los Gatos, Cal.), W. D. Edmonston (in charge of Southern Rocky Mountain Station at Colorado Springs, Colo.), T. E. Snyder and F. C. Craighead, specialists in forest entomology; Jacob Kotinsky and A. B. Champlain, assistants in forest entomology; L. C. Griffith, assistant in shade-tree insects; S. A. Rohwer, specialist in forest Hymenoptera (in charge of Eastern Station at East Falls Church, Va.); A. G. Boving, expert; C. T. Green, specialist on forest Diptera; W. S. Fisher, specialist on forest Coleoptera; Carl Heinrich, specialist on forest Lepidoptera; William Middleton, F. B. Herbert, and J. H. Pollock, scientific assistants.

Investigations of Insects Affecting the Health of Man and Animals. Under immediate direction of the Chief of Bureau and W. D. Hunter.

This field covers the relation between certain ticks and spotted fever, mosquitoes and malaria and yellow fever, and the house fly and typhoid fever. The investigations also deal with insects as internal and external parasites of animals and seek practical methods for their control. A number of pests affecting domestic animals, including the cattle tick, the stable fly, and the horn fly, are being studied.

Scientific staff.—D. L. Van Dine, entomologist, insects affecting health of man; F. C. Bishopp, entomologist, insects affecting health of animals; W. V. King, H. P. Wood, D. C. Parmau, and J. L. Webb, entomological assistants; R. H. Hutchinson and E. W. Laake, scientific assistants; O. G. Babcock, special field agent employed under Food Production Act.

Investigations in Bee Culture. E. F. PHILLIPS, *Apiculturist in charge*.

The structure, development, and behavior of the bee are being investigated. Special attention is given to methods of wintering with chief emphasis at present on the proper temperature of the bee cellar and methods of preparing colonies of bees for outdoor wintering. Bee diseases are being thoroughly studied. The ultimate object is to furnish helpful information to the bee keeper.

Scientific staff.—G. S. Demuth, Kenneth Hawkins, and E. L. Sechrist, apicultural assistants; A. P. Sturtevant, specialist in the bacteriology of bee diseases; C. L. Sams and C. E. Bartholomew, agents; G. C. Matthews, E. F. Atwater, W. H. Foster, S. W. Atkins, D. G. Running, J. H. Wagner, and P. W. Erbaugh, special field agents employed under the Food Production Act.

Gipsy Moth and Brown-tail Moth Investigations. A. F. BURGESS, *Entomologist in charge*.

A large field force is maintained in New England in the work of preventing the spread of these two moths. A laboratory has been established for the assemblage, study, and liberation of imported parasites and diseases affecting these moths. The work of the parasites and their natural enemies is studied in the field and many experiments are conducted for the purpose of devising better methods for use in field operations. A quarantine is maintained, and all products likely to carry these insects are inspected before they are shipped from the infested area.

Scientific staff.—L. H. Worthley, agent, preventing spread of moths; D. M. Rogers, assistant in charge of gipsy-moth quarantine and inspection; S. S. Crossman, C. W. Collins, R. W. Glaser, F. H. Mosher, and R. Wooldridge, entomological assistants; J. N. Summers, J. V. Schaffner, jr., H. A. Preston, C. E. Hood, R. T. Webber, D. W. Jones, and C. F. W. Muesebeck, scientific assistants; G. E. Clement and Willis Munro, assistants in forest management; M. T. Smulyan, specialist in insects as carriers of insect diseases; H. L. McIntyre, C. W. Minott, H. W. Vinton, D. G. Murphy, A. W. Young, H. R. Gooch, M. B. Shepherd, W. A. Swinkwin, A. M. Wilcox, L. E. Gibson, H. L. Blaisdell, F. W. Foster, I. T. Guild, J. E. R. Holbrook, C. B. Russell, D. D. Landers, W. A. Collins, F. W. Graham, H. I. Winchester, P. S. Coffin, and H. J. Miles, gipsy-moth assistants; H. A. Ames, H. N. Bean, F. W. Graves, jr., and C. E. Totman, general foremen.

Miscellaneous Investigations. Under immediate direction of the Chief of Bureau.

The naming, classification, and establishment of the systematic relationships of all insects which are being studied in the various laboratories of the bureau, and the identification of similar material submitted by the agricultural experiment stations and by scientific workers, are included under this head.

Scientific staff.—Rolla P. Currie, Frederick Knab, and C. S. Menagh, entomological assistants; E. A. Schwarz, A. N. Caudell, and H. S. Barger, assistants; E. H. Gibson, scientific assistant.

Editorial Office. ROLLA P. CURRIE, *Editor*; B. A. REYNOLDS, *Assistant*.

The editorial office attends to the editing of manuscripts, the reading of proofs of publications and other printed matter, the preparation of indexes and abstracts, correspondence relating to manuscripts, proofs, and publications, and other work of a similar nature.

BUREAU OF BIOLOGICAL SURVEY.

[Those whose names are starred (*) are on furlough for military service.]

Biologist and Chief of Bureau, E. W. NELSON; *Assistant Chief*, W. C. HENDERSON; *Expert in Game Conservation*, T. S. PALMER; *Administrative Assistant*, A. B. MORRISON; *Chief Clerk and Executive Assistant*, W. ROY DILLON; *Clerk in Charge of Editorial Work*, W. H. CHEESMAN.

The Biological Survey has charge of the work of the department relating to the control and conservation of wild birds and mammals and investigations of their relation to

agriculture. It studies their food habits and investigates methods of protecting beneficial species and controlling harmful ones; experiments in fur farming; controls noxious mammals in national forests and other public domain; makes biological surveys of areas, studies the geographic distribution of wild animals and plants, and maps natural life zones; supervises national mammal and bird reservations; and administers Federal laws protecting birds and game and regulating interstate commerce in game and importations of birds and mammals.

Consulting biologists.—H. W. Henshaw and C. Hart Merriam.

Economic Investigations.

A. K. FISHER, *Assistant in charge.*

Destruction of Noxious Rodents. W. B. BELL and S. E. PIPER, *Assistant Biologists.*

Under this project extensive campaigns are carried on in national forests and other public domain to control depredations of prairie-dogs, ground squirrels, pocket gophers, rabbits, and other rodents destructive to forest, orchard, and nursery stock, farm produce, and ranges. Demonstrations also are made in farming districts of improved methods of combating these animals.

Scientific staff.—D. E. Lantz, T. H. Scheffer. *Assistants.*—G. F. Bateman, J. G. Crick,* W. E. Crouch, U. S. Ebner, F. E. Garlough, D. A. Gilchrist, R. T. Jackson, Joseph Keyes,* A. B. Plummer,* B. B. Richards, James Silver, Duane Stonier, and A. F. Taylor.

Destruction of Predatory Mammals. W. B. BELL and S. E. PIPER, *Assistant Biologists.*

Active campaigns are undertaken for the extermination of wolves, coyotes, mountain lions, and other animals destructive of live stock and poultry.

Field inspectors.—E. F. Averill, R. E. Bateman, C. J. Bayer, W. D. Clemons, L. B. Crawford, L. J. Goldman, G. E. Holman, S. G. Jewett, C. R. Landon, J. S. Ligon, M. E. Musgrave, T. W. Peryam, H. M. Reid, and E. R. Sans.

Fur-Farming Investigations. NED DEARBORN, *Assistant Biologist.*

Investigations in fur farming are concerned with determining productive and economical methods of rearing foxes, minks, martens, and other fur animals in captivity, and ascertaining the areas suited to this industry.

Fur-farm keeper.—G. A. Jeffreys (Keeseville, N. Y.).

Economic Ornithology. W. L. MCATEE, *Assistant Biologist.*

This section investigates the food habits of birds for the purpose of determining the value of birds to agriculture, horticulture, and forestry. By laboratory analyses of stomach contents and by field observations birds are classed as beneficial, neutral, or harmful in their relations to man, and recommendations made for the protection of useful species and the repression of injurious ones. The food habits of waterfowl and upland game birds are investigated with a view to securing information of use in increasing the food supply in depleted areas. Methods of attracting desirable species about homes are studied and recommended.

Scientific staff.—L. L. Buchanan, E. A. Chapin, I. N. Gabrielson, E. G. Holt,* J. D. Hood,* L. O. Jackson, E. R. Kalmbach, D. C. Mabbott, F. P. Metcalf, H. L. Viereck, and Alexander Wetmore.

Biological Investigations.

E. W. NELSON, *Chief, in charge.*

Under this division investigations are conducted in the field to determine the geographic distribution of native wild life, and technical studies are made of groups and species to ascertain relationships and correct classification. The information gathered serves as a foundation for the efficient handling of most of the problems of the Survey. The published results appear in the form of reports on special groups of birds and mammals; also, on the birds and mammals of States and special areas, with maps and charts showing distribution of species and life-zone areas.

Biological Surveys and Distribution of Mammals. VERNON BAILEY, *Chief Field Naturalist*, and E. A. PREBLE, *Assistant Biologist.*

This section conducts investigations to determine the distribution of native animals and plants. Maps are made showing areas occupied by each species of mammal and the summer and winter ranges and migration routes of birds, and from the combined data the natural distribution areas and life zones of the country are outlined. North American mammals are studied in order to determine the distribution, habits, and value

of the different species and to secure data concerning areas to be restocked with big game; also to locate suitable areas for fur farming. Specimens of mammals are identified for Government bureaus, scientific and educational institutions, and private individuals.

Scientific staff.—E. A. Goldman,* A. H. Howell, H. H. T. Jackson, H. C. Oberholser, and W. P. Taylor.

Distribution and Migration of Birds. H. C. OBERHOLSER, *Assistant Biologist.*

This section investigates the migration of North American birds, mainly through reports from several hundred volunteer observers and through the work of field parties. The data obtained serve as a basis for protective legislation, both State and national. A national count of birds, made each spring by several hundred observers throughout the United States, is also of value in connection with the conservation and increase of useful species. Enumerations of migratory waterfowl, combined with an investigation of conditions in their breeding grounds and winter resorts, furnish information which will greatly assist in the conservation of these birds. Specimens of birds are identified for Government bureaus and for educational institutions, museums, and private individuals.

Scientific staff.—Francis Harper,* A. H. Howell, and E. A. Preble.

Interstate Commerce in Game.

W. F. BANCROFT, *Assistant in charge.*

This division issues permits for importations and regulates the entry of foreign wild birds and mammals; issues permits for shipments from Alaska of specimens for scientific and exhibition purposes. Information concerning game is prepared for publication; a card index of State game laws and various indexes of information concerning game protection are maintained; and summaries of State and Federal game laws and a directory of game officials are issued annually. Violations of the Lacey Act, regulating interstate commerce in game, which covers not only birds and game shipped to market but also interstate shipments of plumage, are investigated by the field force, the necessary evidence is collected, and the first steps taken in preparing each case for legal action.

Assistant.—F. L. Earnshaw. *Field assistants.*—E. C. Higgins (Salem, Mo.), W. H. Ransom (Spokane, Wash.), B. J. Shaver (Ashland, Wis.), C. P. S. Smith * (Chicago, Ill.), Albert Stadlmeir (Lackawanna, N. Y.), and E. V. Visart (Little Rock, Ark.).

Mammal and Bird Reservations.

G. W. FIELD, *Assistant in charge.*

This division has supervision over the 74 Federal mammal and bird reservations. The 6 big game reservations are the Montana National Bison Range; the Winter Elk Refuge in Jackson Hole, Wyoming; the game preserves on the Wind Cave National Park, South Dakota, and Sullys Hill National Park, North Dakota; and the Niobrara Reservation, Nebraska. Birds also are protected on these reservations.

Reservation inspectors.—F. M. Dille (Valentine, Nebr.), George Willett (Los Angeles, Cal.), G. G. Cantwell (Puyallup, Wash.), and B. J. Pacetti (Ponce Park, Fla.).

Federal Migratory-Bird Law.

G. A. LAWYER, *Assistant in charge.*

This division administers the Federal migratory-bird law and publishes and enforces regulations made thereunder for the protection of migratory game and insectivorous birds. The law is administered in cooperation with State authorities with the aid of some 200 State deputies commissioned as Federal wardens, who act under the direction of 16 inspectors, each assigned to a definite district.

Assistant.—J. E. Mercer. *District inspectors.*—F. W. Hennessy, Providence, R. I.; P. S. Farnham, Owego, N. Y.; T. T. Bloxom, Locustville, Va.; H. H. Bailey, Newport News, Va.; T. S. Meekins, Manteo, N. C.; J. H. Rice, jr., Rittter, S. C.; W. S. Hanson, Fort Myers, Fla.; S. W. Linebaugh, Russellville, Ky.; B. G. Merrill, Hinsdale, Ill.; W. D. Wacaser, Mount Pulaski, Ill.; E. A. Cleasby, Eau Claire, Wis.; Harry Barmeier, St. Louis, Mo.; R. P. Holland, Atchison, Kans.; H. H. Kopman, New Orleans, La.; Ralph Benton, Los Angeles, Cal.; E. S. Catron, Portland, Oreg.

DIVISION OF ACCOUNTS AND DISBURSEMENTS.

Chief of Division and Disbursing Clerk, A. ZAPPONE.

Administrative Assistant, W. J. NEVIUS.

This division has charge of the disbursement of public funds appropriated for the Department of Agriculture and the keeping of accounts and appropriate ledgers in connection therewith.

Cashier's section. W. R. FUCHS, *Cashier and Chief Clerk, in charge.*

This section prepares and mails all checks and handles all moneys received and disbursed and handles the vouchers in connection with the Weeks forestry law.

Bookkeeper's section. M. J. O'TOOLE, *Accountant and Bookkeeper, in charge.*

This section keeps the books pertaining to the fiscal affairs of the department, prepares requisitions on the Treasury for advance of public funds, and compiles quarterly abstracts of expenditures and collections and an account current covering the liability for public funds.

Examining section. EVERETT D. YERBY, *Supervising Auditor, in charge.*

This section examines all accounts before payment.

Miscellaneous section. J. M. KEMPER, JR., *Deputy Disbursing Clerk, in charge.*

This section performs miscellaneous work not assigned to other sections.

PUBLICATION WORK.

CLARENCE OUSLEY, *Assistant Secretary of Agriculture, in charge.*

Editorial. E. B. REID, *Chief Editor, in charge.*

The work of this office includes the consideration and critical examination of all manuscripts submitted for publication by the various bureaus, divisions, and offices of the department. In making constructive criticisms and suggestions for the improvement of manuscripts, the chief editor is authorized to consult fully and freely with the chiefs of the bureaus, divisions, and offices, the authors of manuscripts, and any other officer or employee of the department.

Information. ———, *Chief.*

The Office of Information is established to secure circulation in popular form for the discoveries and recommendations of the scientists, specialists, and field workers of the department. It gives out to the public press agricultural facts taken from publications and official orders, and also from oral statements of specialists. Material so disseminated is set forth in such form as to attract public attention, be easily understandable, and lead to the adoption of the methods recommended. A Weekly News Letter is published. The office also prepares circulars, posters, and pamphlets designed to assist workers in carrying out educational and demonstration plans.

Publications. JOS. A. ARNOLD, *Chief*; B. D. STALLINGS, *Assistant Chief*; A. I. MUDD, *Chief Clerk.*

This division conducts all business of the department transacted with the Government Printing Office; has general supervision of all printing, indexing, illustration, binding, and distribution of publications, and the maintenance of mailing lists.

Printing. B. D. STALLINGS, *Assistant Chief, in charge.*

This section receives and transmits to the printer all matter to be printed. It keeps the records showing the receipt of manuscripts for publication and for miscellaneous printing of every description. It receives and distributes all proof and examines that of miscellaneous printing, prepares correspondence relating to printing and illustrations, and inspects completed work.

Indexing. CHARLES H. GREATHOUSE, *Assistant in charge.*

Two kinds of indexes are made: (1) Indexes to be printed with individual publications; (2) a general card index, by subjects, of all publications of the department. Congressional documents are obtained for department officials, and the Congressional Record is marked daily for their attention.

Illustrations. A. B. BOETCHER, *Assistant in charge.*

Drawings and photographs are made for use in illustrating publications and also for use in the various branches of the department's work. Photographic prints and lantern slides are sold to the public.

Document Section. FRANCIS J. P. CLEARY, *Assistant in charge.*

This section receives and distributes the publications designed for departmental use; mails circulars and documents not intended for public distribution; furnishes mailing lists and makes orders upon the Public Printer for the mailing of publications intended for the public; specifies the publications to be sent in response to miscellaneous requests; prepares correspondence relating to, and keeps all records of the distribution of publications, including the Congressional quotas of Farmers' Bulletins; addresses franks and envelopes, and prepares addresses for mailing lists, of which a general index is kept up to date; and duplicates official circulars as well as the information prepared for the press.

BUREAU OF CROP ESTIMATES.

Statistician and Chief of Bureau, LEON M. ESTABROOK; *Assistant Chief of Bureau*, NAT C. MURRAY; *Chief of Division of Crop Reports*, EDWARD CRANE; *Chief of Field Service*, SAMUEL A. JONES; *Chief of Division of Crop Records*, FRANK ANDREWS; *Chief Clerk*, CHARLES E. GAGE; *Statistical Scientists*, GEORGE K. HOLMES and CHARLES M. DAUGHERTY.

The Bureau of Crop Estimates collects crop data, issues the monthly crop reports of the department, prepares the statistical portion of the Department Yearbook, and conducts special inquiries relative to estimates of United States and foreign crops for inclusion in bulletins and correspondence.

Crop Reporting Board.

A Crop Reporting Board, consisting of the chief of bureau (chairman) and four other members selected from the officials and agents of the bureau, considers in secret session all available data and issues periodic reports relative to acreage in planting season, condition and indicated yield during the growing season, and production and yield at harvest time of the speculative crops. The chief of bureau and his assistants consider data and issue corresponding reports for nonspeculative crops and live stock.

Division of Crop Reports.

Field service.—The service outside of Washington consists of 42 field agents, 10 crop specialists, and various independent lists of voluntary reporters, numbering in all approximately 160,000. The field agents and crop specialists keep in touch with the best informed opinion throughout their districts by travel and by maintenance of special corps of reporters, and render periodic reports for their respective territories. Of the voluntary correspondents the county reporters submit reports regularly for their respective counties and the township reporters for their respective localities. Summaries of reports from these three independent sources form the bases of the reports issued by the bureau. Special lists of reporters are maintained for special inquiries.

Clerical force.—The clerical force of the Division of Crop Reports maintains various independent lists of voluntary crop reporters to whom regular and special blank schedules of inquiry are submitted for data desired. The information so secured is tabulated and arranged in convenient form for study and analysis by the Statistician and Crop Reporting Board.

Division of Crop Records.

The Division of Crop Records collects and makes available for study and use data relative to the agricultural products of the United States and foreign countries, prepares tables and special articles for the Department Yearbook and bulletins, provides statistical information in response to special inquiries, and conducts inquiries relative to various statistical phases of agriculture. A well-equipped library of agricultural statistics is maintained.

LIBRARY.

Librarian, CLARIBEL R. BARNETT; *Assistant Librarian*, EMMA B. HAWKS.

The department library, consisting of the main library and the various bureau, division, and office libraries, contains approximately 145,000 books and pamphlets, including an extensive collection on agriculture and all its branches, a large and representative collection on the sciences related to agriculture, and a good collection of standard reference books. In addition to the department use, books are lent to college and experiment station libraries and other institutions for use in connection with the researches of these institutions. Periodicals currently received number more than 2,300. A dictionary card catalogue is maintained consisting of about 375,000 cards. Printed catalogue cards for publications of the department are prepared by the department library and printed at the Library of Congress. The librarian has charge of the foreign mailing lists for department publications.

STATES RELATIONS SERVICE.

Director, A. C. TRUE.

The States Relations Service represents the Secretary of Agriculture in his relations with the State agricultural colleges and experiment stations under the acts of Congress granting funds to these institutions for agricultural experiment stations and cooperative extension work in agriculture and home economics, and in carrying out the provisions of acts of Congress making appropriations to this department for farmers' cooperative

demonstration work, investigations relating to agricultural schools, farmers' institutes, and home economics, and the maintenance of agricultural experiment stations in Alaska, Hawaii, Porto Rico, and Guam.

Office of the Director.

EUGENE MERRITT, *Administrative Assistant*; Mrs. C. E. JOHNSTON, *Chief Clerk*; F. E. SINGLETON, *Chief Accountant*; Miss E. L. OGDEN, *Librarian*.

Editorial Division. W. H. BEAL, *Chief*.

This division edits and prepares for printing all publications of the States Relations Service except the Experiment Station Record; cooperates with the Division of Publications in maintaining mailing lists and in the distribution of publications of the service; and has charge of lantern slides and other illustrative material.

Staff.—Reuben Brigham, specialist in visual instruction in agriculture and in charge of section of illustrative material; C. H. Hanson, specialist in illustrative material.

Investigations on Agricultural Instruction in Schools. F. E. HEALD, *Specialist in Agricultural Education*.

These investigations include studies of the methods and subject matter of school instruction in agriculture in this and other countries, with a view to determining the needs of such instruction in order to make it practically useful to students who are to become farmers or workers in agricultural institutions, and to furnish schools with up-to-date and properly organized subject matter and illustrative materials in the various branches of agriculture, to supplement and reinforce textbooks and field practices.

Staff.—Hugh Findlay, assistant specialist in visual agricultural instruction; Alvin Dille, assistant in agricultural education; Marie T. Spethmann, compiler and statistical clerk.

Investigations on Farmers' Institutes and Movable Schools. J. M. STEDMAN, *Farmers' Institute Specialist*.

These investigations include studies on farmers' institutes, movable agricultural schools, and similar organizations carried on in this and other countries, especially with a view to devising and experimenting with modified or new methods adapted to conditions in the United States, and to providing farmers' institute and extension workers with publications and illustrative material especially adapted to their needs.

Office of Experiment Stations.

E. W. ALLEN, *Chief, and Editor of Experiment Station Record*.

Relations with Institutions for Agricultural Research.

Under this head the office is broadly organized to give the State agricultural experiment stations such advice and assistance as will best promote their efficiency. It also collects and disseminates information regarding similar institutions throughout the world. Among its activities in relation to the stations are the following:

Examination of work and expenditures of the State experiment stations.—The office supervises the Federal funds granted to the State agricultural experiment stations under the acts of Congress of March 2, 1887, and March 16, 1906, with respect to the use made of these funds and the kind of work for which they are employed. This duty is assigned especially to the Chief, with the assistance of W. H. Beal, Walter H. Evans, J. I. Schulte, and E. R. Flint.

Experiment Station Record.—The office publishes the Experiment Station Record, a periodical which gives abstracts of the publications of the experiment stations, the Department of Agriculture, and of other institutions and individuals reporting investigations in agricultural science in the different countries of the world. The Record also contains editorials and notes bearing upon station work. The staff of the Record is as follows: Editor, E. W. Allen; assistant editor, H. L. Knight; agricultural chemistry and agro-techny, Sybil L. Smith; meteorology, soils, and fertilizers, W. H. Beal and J. D. Luckett; agricultural botany, bacteriology, and plant pathology, W. H. Evans and W. E. Boyd; field crops, J. I. Schulte and J. D. Luckett; horticulture and forestry, E. J. Glasson; foods and human nutrition, C. F. Langworthy and Louise B. Pritchett; zootechny, dairying, and dairy farming, M. D. Moore; economic zoology and entomology, W. A. Hooker; veterinary medicine, W. A. Hooker and Sybil L. Smith; rural engineering, R. W. Trullinger; rural economics, Eugene Merritt; agricultural education, F. E. Heald and Marie T. Spethmann; indexes, M. D. Moore.

Division of Insular Experiment Stations. WALTER H. EVANS, *Chief*.

The experiment stations in Alaska, Hawaii, Porto Rico, and Guam are conducted under the general direction of this division.

Alaska Agricultural Experiment Stations. C. C. GEORGESON, Sitka, *Agronomist in charge.*

The main station in Alaska is at Sitka. Investigations are also carried on at Rampart, in the Yukon Valley; at Kodiak; at Fairbanks, in the valley of the Tanana River, and at Matanuska, near the Government railroad. The work consists of field experiments with vegetables, cereals, and forage plants; horticultural investigations; the maintenance of live stock; the curing of hay and silage; the distribution of seeds; and an agricultural survey of the Territory.

Staff.—G. W. Gasser, assistant in charge, Rampart; M. D. Snodgrass, assistant in charge, Fairbanks; W. T. White, assistant, Fairbanks; H. E. Pratt, assistant in charge, Kodiak; H. S. Loyd, animal husbandman, Kodiak; F. E. Rader, assistant in charge, Matanuska.

Hawaii Agricultural Experiment Station. J. M. WESTGATE, Honolulu, *Agronomist in charge.*

The activities of this station are concerned with cotton, rice, forage crops, fiber, and horticultural plants; with soils, plant diseases, insects, and extension work. In cooperation with the Hawaiian Government, a demonstration farm is maintained on the island of Hawaii.

Staff.—J. E. Higgins, horticulturist; J. H. Cowan, assistant in horticulture; M. O. Johnson, chemist; K. A. Ching, assistant chemist; C. W. Carpenter, plant pathologist; R. A. Goff, in charge of Glenwood substation; C. A. Sahr, assistant agronomist; F. G. Krauss, superintendent of extension work.

Porto Rico Agricultural Experiment Station. D. W. MAY, Mayaguez, *Agronomist in charge.*

Investigations of this station relate especially to the growing of coffee, field crops, and horticultural plants, the development of animal husbandry and dairying, soils, vegetable pathology, and entomology. Cooperative and demonstration work is also in progress.

Staff.—P. L. Gile, chemist; J. O. Carrero, assistant chemist; ———, horticulturist; T. B. McClelland, assistant horticulturist; W. P. Snyder, assistant in plant breeding, W. V. Tower, entomologist; E. W. Brandes, plant pathologist; H. E. Thomas, assistant plant pathologist; H. C. Henriksen, specialist in farm management; and W. A. Mace, agricultural technologist.

Guam Agricultural Experiment Station. C. W. EDWARDS, *Animal Husbandman, in charge.*

The station in Guam is located near Agaña, the principal town. Experiments are being conducted in improved methods of cultivation, introduction and improvement of tropical agricultural crops, and introduction of improved live stock.

Staff.—G. Briggs, agronomist; P. Nelson, assistant.

Office of Extension Work in the South.

BRADFORD KNAPP, *Chief.*

Relations with Extension Divisions of Agricultural Colleges in 15 Southern States.

Under this head the office cooperates with the extension divisions of the State agricultural colleges within its territory in their extension work in agriculture and home economics, under the act of Congress of May 8, 1914. It also acts as an agency for coordinating the extension work of the several bureaus of the department with similar work carried on by the agricultural colleges.

Farmers' Cooperative Demonstration Work.

Under this head extension and demonstration work on all subjects relating to agriculture, home economics, and rural life generally is carried on through practical demonstrations and instruction under the supervision and management of State, district, and county agents working with individuals and through organizations of farm men and women and boys' and girls' clubs. This work is supported by direct congressional appropriation to the department, but is done in cooperation with State colleges of agriculture, departments of agriculture and education, county governments and organizations, and others. In the cotton territory the work includes the teaching and demonstration of methods of meeting the ravages of the cotton-boll weevil.

States.—Texas, Oklahoma, Louisiana, Arkansas, Tennessee, Mississippi, Alabama, Georgia, Florida, South Carolina, North Carolina, Virginia, Maryland, West Virginia, and Kentucky.

Scientific staff.—County agent work: J. A. Evans, assistant chief; W. B. Mercier, agriculturist and field agent for Arkansas, Louisiana, Tennessee, and North Carolina, and in general charge of cooperative projects; H. E. Savely, agriculturist and field agent for Mississippi, Alabama, South Carolina, Georgia, and Florida; E. A. Miller, agriculturist and field agent for Kentucky, Maryland, Virginia, and West Virginia; C. H. Alvord, agriculturist and field agent for Texas and Oklahoma. Boys' and girls' club work and home demonstration work: O. B. Martin, assistant in general charge; I. W. Hill, assistant in charge, and C. L. Chambers, assistant in boys' club work; Mary E. Creswell and Ola Powell, assistants in home demonstration and girls' club work; Madge J. Reese and Hannah L. Wessling, assistants in home demonstration work; Frants P. Lund, specialist in drying and canning; Agnes E. Harris, assistant in charge of urban home demonstration work.

H. W. Barber, assistant in charge of crop records and statistics.

W. H. Conway, executive assistant.

Specialists detailed by subject-matter divisions of the department to act through the Office of Extension Work in the South in relation to the field work in the various Southern States: ———, representing animal husbandry; J. H. McClain, representing dairy husbandry; W. R. Mattoon, representing forestry; J. W. Kinghorne, representing poultry husbandry; C. L. Goodrich, representing farm management; Kenneth Hawkins, representing bee culture; and L. O. Watson, representing cotton and truck-crop diseases.

Field extension staff.—County agent and boys' club work (men agents): 15 State agents, 26 assistant State agents, 62 district agents, 929 county agents, 71 local agents, 43 special community leaders in club work. Home demonstrations and girls' club work (women agents): 15 State agents, 25 assistant State agents, 27 district agents, 754 county agents, 59 local agents. Total, 2,026.

Office of Extension Work in the North and West.

C. B. SMITH, *Chief*; L. A. CLINTON, *Assistant Chief*.

Relations with Extension Divisions of Agricultural Colleges in 33 Northern and Western States.

Under this head the office cooperates with the extension divisions of the State agricultural colleges within its territory in their plans and expenditures for extension work in agriculture and home economics under the act of Congress of May 8, 1914. It also acts as an agency for coordinating the extension work of the several bureaus of the department with similar work carried on by the agricultural colleges.

Farmers' Cooperative Demonstration Work.

Under this head extension and demonstration work on subjects relating to agriculture, home economics, and rural life generally is carried on through practical demonstrations and instruction under the supervision and management of State, district, and county agents working through organizations of farm men and women and boys' and girls' clubs. This work is in cooperation with State colleges of agriculture, county governments and organizations, and others. Demonstrations in farm management form a special line of work.

States.—Arizona, California, Colorado, Connecticut, Delaware, Idaho, Illinois, Indiana, Iowa, Kansas, Maine, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, Vermont, Washington, Wisconsin, Wyoming.

Scientific staff.—Cooperative relations: L. A. Clinton, assistant chief, in charge; D. W. Working and R. W. Redman, agriculturists. Administrative subject-matter specialists: A. P. Graham, assistant agriculturist, in charge; H. J. Wilder, agriculturist extension specialist in soils; A. F. Hawes, extension specialist in forestry; R. H. Elsworth, extension specialist in marketing; C. P. Close, extension specialist in horticulture; ———, extension specialist in animal husbandry; J. W. Kinghorne, extension specialist in poultry husbandry; Helmer Rabild, extension specialist in dairying. County agent work: W. A. Lloyd, agriculturist, in charge; H. B. Fuller, W. M. Cook, O. S. Fisher, and L. R. Simons, agriculturists; H. W. Gilbertson, assistant agriculturist. Boys' and girls' club work: O. H. Benson, agriculturist, in charge; G. E. Farrell, assistant agriculturist; Miss Gertrude L. Warren, assistant, junior extension work. Farm-management demonstrations: L. A. Goddard, agriculturist, in charge; P. K. Whelpton, scientific assistant; F. A. Roper, assistant in farm economics. Extension work with farm women: Florence E. Ward, assistant agriculturist, in charge.

J. A. Liggett, executive assistant.

Field extension staff.—County-agent work: 33 State leaders, 57 assistant State leaders, 19 district emergency demonstration leaders, 724 county agents, 80 assistant county

agents. Boys' and Girls' club work: 29 State leaders, 60 assistant State leaders, 97 district leaders. Farm-management demonstrations: 26 State demonstrators, 5 assistant State demonstrators. Extension work with farm women: 34 State leaders, 28 assistant State leaders, 118 district home-demonstration agents, 316 county home-demonstration agents, 3 city home-demonstration leaders, 56 city home-demonstration agents.

Office of Home Economics.

C. F. LANGWORTHY, *Chief*; A. D. HOLMES, *Acting Assistant*.

Studies of Food, Dietetics, Clothing, and Household Equipment, Work, and Management.

The Office of Home Economics investigates, both from the scientific and practical standpoint, the nature and uses of agricultural products utilized in the home for food, clothing, and equipment, and the methods of household work and management. The publications of the Office of Home Economics make available to housekeepers, teachers, students, and extension workers the results of such studies and the results of practical experience gathered in the home and elsewhere. Respiration calorimeter investigations include a study of food, clothing, and household equipment and household work with particular reference to energy values and efficiency. Special respiration calorimeter investigations on other subjects included within the work of the department are carried on in cooperation with the different bureaus.

Scientific staff.—Helen W. Atwater, Ilena M. Bailey, H. G. Barott, H. J. Deuel, jr., W. B. Emerson, A. D. Holmes, Caroline L. Hunt, M. H. Leonard, D. Matlin, Jean MacKinnon, Louise B. Pritchett, assistants in investigations.

OFFICE OF PUBLIC ROADS AND RURAL ENGINEERING.

[Those whose names are starred (*) are on furlough for military service.]

Director, LOGAN WALLER PAGE; *Chief Engineer*, P. ST. J. WILSON; *Chief of Management*, J. E. PENNYBACKER; *General Inspectors*, T. WARREN ALLEN and E. W. JAMES.

In addition to the work comprised in the regular appropriations of the Office of Public Roads and Rural Engineering, the administration of the Federal Aid Road Act has been intrusted by the Secretary of Agriculture to the Director of the Office of Public Roads and Rural Engineering. The organization of the office has been revised so as to meet this new responsibility through the creation of two main branches of the office, known respectively as (1) Engineering and (2) Management and Economics. The Engineering branch deals with the engineering activities of the office under both the Federal Aid Road Act and the regular appropriations, except engineering economics. The Management and Economics branch deals with the administrative, legal, and economic work of the office under both the regular appropriations and the Federal Aid Road Act.

The Office of Public Roads and Rural Engineering investigates systems of road management and methods of road construction and maintenance; details engineers to instruct local officials in road building through supervising object-lesson roads; gives advice to State and county authorities on all matters relating to road construction, maintenance, and management; investigates the location, properties, and economic values of road materials; constructs experimental roads to demonstrate and test methods and materials of construction; investigates the effect of various kinds of traffic on road surfaces; studies traffic regulations; compiles statistics relating to public roads; conducts educational work through lectures, the distribution of lantern slides, and the exhibit of models; cooperates with the Forest Service on road work conducted with the proceeds of the 10 per cent appropriation from forest receipts; has charge of the survey, construction, and maintenance of roads in and adjacent to the national forests for which appropriation is made in section 8 of the Federal Aid Road Act; conducts, under instructions from the Secretary of Agriculture, the operation of the Federal Aid Road Act under which aid is granted to the several States in the construction of rural post roads; investigates and reports concerning the best methods of utilization of water in farm irrigation and concerning the development of the most efficient equipment for farm irrigation; studies the duty, apportionment, and measurement of irrigation water, and the customs, regulations, and laws affecting irrigation; gives advice and assistance in farm irrigation; investigates and reports upon the drainage of farms and of swamp and other wet lands otherwise available for agriculture; conducts field experiments and investigates in regard to construction and equipment in farm-drainage systems; gives advice and assistance in farm drainage; investigates the domestic water supply and drainage disposal of the farm; investigates and gives advice on construction of farm buildings, farm machinery, and on other rural engineering problems.

Road Management Investigations. J. E. PENNYBACKER, *Chief of Management, in charge.*

This work, in general, embraces engineering economics relating to the various lines of activity conducted by the office and specifically to highways; legislative investigations, the collection and compilation of statistical data, the management of the educational work which is conducted by means of lectures and exhibits, and the advisory work with reference to economics, legislation, and management. The chief of management has charge, in addition to the foregoing lines of work, of the general administrative work of the entire organization and of the administrative and legal questions arising out of the administration of the Federal Aid Road Act.

Scientific staff.—M. O. Eldridge and L. E. Boykin, assistants in road economics; A. P. Anderson, R. F. Eastham, J. L. Harrison, and H. S. Parry, highway engineers; G. C. Clarke, B. E. Gray, W. E. Rosengarten, and J. J. Tobin, engineer-economists; H. W. Hendley, model maker.

Road Construction and Maintenance. P. ST. J. WILSON, *Chief Engineer*; A. E. LODER, *Assistant Chief Engineer*; V. M. PEIRCE, *Assistant Engineer*; O. L. GROVER, *Bridge Engineer.*

Post road construction and forest road construction and maintenance.—This work covers the construction of rural post roads in cooperation with the State highway departments and the survey, construction, and maintenance of national forests roads in cooperation with the Forest Service and the State and local authorities.

For convenience in handling the work 10 districts have been established, as follows: No. 1, Washington, Oregon, Idaho; No. 2, California, Nevada, Arizona, New Mexico; No. 3, Montana, Wyoming, Utah, Colorado; No. 4, North Dakota, South Dakota, Minnesota, Wisconsin; No. 5, Nebraska, Iowa, Kansas, Missouri; No. 6, Texas, Oklahoma, Arkansas, Louisiana; No. 7, Michigan, Illinois, Indiana, Kentucky; No. 8, Tennessee, Mississippi, Alabama, Georgia, South Carolina, Florida; No. 9, Maine, New Hampshire, Massachusetts, Vermont, New Jersey, Connecticut, Rhode Island, New York, Delaware; No. 10, Ohio, Pennsylvania, Maryland, West Virginia, Virginia, North Carolina.

Scientific staff.—District engineers: District No. 1, L. I. Hewes; District No. 2, C. H. Sweetser; District No. 3, J. A. Whittaker; District No. 4, E. O. Hathaway; District No. 5, J. C. Wonders; District No. 6, J. D. Fauntleroy; District No. 7, J. T. Voshell; District No. 8, J. T. Bullen; District No. 9, G. H. Miller; District No. 10, H. K. Bishop.

Road building and maintenance investigations.—These investigations cover the building of object-lesson roads and object-lesson bridges; the development of county road systems; making inspections and giving expert advice on road and bridge construction; the superintendence of county roads; the making of road surveys; systems of road maintenance; the maintenance of object-lesson, experimental, and post roads; conducting object lessons in road maintenance; the construction of roads within the national forests, in cooperation with the Forest Service; the preparation of typical plans for highway bridges and culverts; and experiments with bridge materials.

Scientific staff.—B. H. Burrell, Geo. L. Campen, Wm. A. Crossland, B. J. Finch, S. E. Fitch, W. C. Harger, B. F. Heidel, Franklin D. Hudgins, J. W. Johnson, Chas. H. Kendall, C. K. Keyser, E. E. Kldder, E. C. Lawton, H. H. Lotter, W. H. Lynch, W. A. McCalla,* U. S. Marshall, Chas. H. Moorefield,* Charles C. Morris, Clarence E. Raynor, Wm. H. Rhodes, jr.,* Edw. F. Ruggles, Geo. C. Scales, J. T. Schuyler, George C. See, Edwin P. Shuman, Wm. L. Spoon, Chester H. Stillman, Raymond E. Toms,* Wm. H. Waugh,* E. L. Wulff, Jos. F. Bright, jr. Walter F. Brooks, Chas. L. Brown, J. H. Skeggs,* C. G. Morrison, senior highway engineers; E. S. Alderman, J. C. Carpenter, C. W. Cheatham, H. K. Craig, R. H. Harrison, Hamilton V. Miles, A. E. Palen, O. N. Powell,* S. Le Roy Taylor, Virginius E. Towles, Herbert C. Wells, Ernest S. Wheeler, highway engineers; Kenneth C. Balcomb, John W. Ball, Fred A. Davis, Albert C. Dunn, A. L. Hooper,* Wm. F. Jeffrey, F. R. Lyons,* J. L. Matthias, Harland S. Parry, Jarl T. Pauls, T. C. Peterson, Percy A. Rideout,* Paul B. Whitney, junior highway engineers; O. W. Childs, J. V. McNary, senior highway bridge engineers; Ralph M. Bowman, J. S. Clay, R. H. II. Spidel, Geo. D. Whittle, highway bridge engineers; Benj. F. Beezley, Vernon L. Bonner, Robert A. Brown, H. A. Calkins, Charles F. Capes, J. H. Dodge, J. H. Eldridge, I. R. Grosvenor,* D. G. Halre, Chas. F. Harrison, David L. McBeath, Luke E. Smith, Arthur V. Williamson, superintendents road construction; Lyster G. Bayly, A. R. Losh, engineer economists; Rodney D. Brown, Robert L. Hughes, chiefs of survey parties; T. L. Alnsworth, O. P. Solem, engineer draftsmen.

Road Material Tests and Research. PRÉVOST HUBBARD, *Chemical Engineer, in charge of Physical, Chemical, and Concrete Laboratories.*

These investigations cover the routine chemical testing and inspecting of dust preventives and road binders and materials allied to road construction; microscopic examination and classification of road-building rocks; research on properties of dust preventives and road binders; standardization of methods of testing bituminous road materials, experimental bituminous road construction and maintenance; physical testing of road-building materials; nonbituminous road material investigations; standardization of tests on nonbituminous road materials.

Scientific staff.—A. T. Goldbeck, engineer of tests; F. H. Jackson, jr., assistant testing engineer; George E. Ladd, economic geologist; C. S. Reeve, chemist; B. A. Anderson and R. H. Lewis, assistant chemists; C. W. Mitman, aid in mineral technology; H. S. Fairbank, senior highway engineer; E. C. E. Lord, petrographer; Daisy Gordon, assistant in chemistry of bituminous materials.

Field Experiments. P. ST. J. WILSON, *Chief Engineer*, and PRÉVOST HUBBARD, *Chemical Engineer, in charge of road construction*; and E. B. MCCORMICK, *Mechanical Engineer, in charge of traction tests.*

This work comprises the construction of experimental roads in cooperation with local administrative units for the purpose of demonstrating the best methods of constructing new types of roads and of studying the effect upon these roads of traffic under known conditions; investigations concerning various road materials and preparations; investigating and developing equipment intended for the preparation and application of bituminous and other binders; and the conduct of traction tests in order to determine the respective resistance of various road surfaces, and the relative values of wide and narrow tires, of different diameters of wheels, width of tread, together with the effect of grade and method of hitching on the effort that may be exerted by horses; also to determine the effect both on the draft required and on the road surface of increasing the load beyond certain limits.

Scientific staff.—Various members of the force of highway engineers, mechanical engineers, chemists, and student assistants in the office.

Investigations of Rural Engineering Problems and Farm Structures. E. B. MCCORMICK, *Mechanical Engineer, in charge.*

These investigations involve the study of the domestic water supply and disposal of sewage on the farm; recommendations and plans for farm buildings and structures involved in rural improvement, with reference to convenience and economy; research, cooperative, and experimental demonstrations of rural problems involving an expert knowledge of mechanical principles; and instrument making and repairing.

Scientific staff.—M. C. Betts, architect; L. L. Beebe, A. M. Daniels, and Elmer Johnson, assistant mechanical engineers; A. D. Morehouse, agricultural engineer; Wallace Ashby, barn architect; W. R. Humphries, assistant in rural engineering; C. D. Haynes and F. D. Phillips, architectural draftsmen; J. A. Cook, architectural draftsman (temporary appointment); J. E. Crux, architectural draftsman (temporary appointment); C. Kruegl, architectural draftsman; T. A. H. Miller, estimator; G. M. Warren, hydraulic engineer.

Irrigation Investigations. SAMUEL FORTIER, *Chief in charge of Irrigation Investigations.*

These investigations include the following subjects: Utilization of water in farm irrigation; pumping for irrigation; irrigation appliances and equipment; flow of water in ditches, pipes, and other conduits; measurement of water; customs, regulations, and laws relating to irrigation; drainage of irrigated lands; expert advice and assistance.

Scientific Staff.—William L. Rockwell, Frederick C. Scobey, Clarence E. Tait, senior irrigation engineers; Samuel H. Beckett, Frederick L. Bixby, V. M. Cone, H. C. Diesem, Paul E. Fuller, H. W. Grunsky, F. G. Harden, S. T. Harding, Chester G. Haskell, W. W. McLaughlin, Albert T. Mitchelson, Ralph L. Parshall, Frank J. Veigmeyer, Milo B. Williams, irrigation engineers. H. H. Kidder, M. R. Lewis, T. H. McCarthy, James C. Marr, Carl Rohwer,* Reuben B. Sleight,* assistant irrigation engineers; Frank Adams, irrigation engineer; Paul A. Ewing, Wells A. Hutchins,* assistants in irrigation economics; Robert G. Hemphill, irrigation farmer; William G. Sloan, drainage engineer for irrigation lands; Louis T. Jessup, assistant drainage engineer; Ray P. Teele, irrigation economist; R. A. Hart, senior drainage engineer.

Drainage Investigations. S. H. MCCRORY, *Chief in charge of Drainage Investigations.*

These investigations embrace the following subjects: Methods of removing surplus water from lands having agricultural value; protection of lands from periodical overflow

of streams; reclamation of tidal lands; control and conservation of rainfall on hillside lands; construction and maintenance of farm drainage works; equipment for use in constructing and maintaining farm drainage works; and costs and methods of organizing and financing community drainage projects.

Scientific staff.—Harry H. Barrows,* Ora C. Baxter, George R. Boyd,* F. C. Eason, J. R. Haswell,* L. A. Jones,* Roger D. Marsden, Dalton G. Miller, James V. Phillips, Charles E. Ramser, Fred F. Shafer, Perry T. Simons,* David L. Yarnell, H. M. Lynde, senior drainage engineers; A. G. Hall, W. N. Hall, Guy A. Hart, William J. Schlick, John T. Stewart, Edward C. Thomas, Sherman M. Woodward, drainage engineers; Quincey C. Ayers,* J. L. Chambers, Dan S. Helmick,* A. L. Lane,* Guy L. Smith,* Frederick E. Staebner, W. B. Booth,* Charles Kirschner, Kay B. Knudsen, junior drainage engineers; F. W. Stanley, senior irrigation engineer; W. B. Gregory,* Irrigation engineer; G. A. Mitchell,

BUREAU OF MARKETS.

[Those whose names are starred (*) are on furlough for military service.]

Chief, CHARLES J. BRAND; *Assistant Chief*, HERBERT C. MARSHALL; *Chief Clerk*, C. L. SNOW; *Administrative Assistant*, R. V. BAILEY; *Librarian*, CAROLINE B. SHERMAN.

The studies of the Bureau of Markets cover such subjects as: Market conditions, demands for specific crops; sources of supply; methods of grading, standardizing, packing, and shipping farm products; the nature of the commercial transactions by means of which farm produce moves from the farm to the consumer; waste in marketing; methods of accounting and business practice for marketing agencies; profits in handling farm products with means for the reduction of those which are excessive; and cooperative associations of farmers for handling rural problems. Under regular appropriations, market news services are conducted for certain fruits and vegetables and live stock and meats. With the war emergency funds, this work has been greatly extended. Under the emergency funds, market reports are issued on dairy products, and on grain, seeds, and hay, and an inspection service, to determine the condition as to soundness of fruits and vegetables and other food products, has been inaugurated. The regulatory work conducted by the Bureau of Markets consists in the enforcement of the United States cotton futures act, the United States grain standards act, and the United States standard container act. The bureau also is charged with the administration of the warehouse act.

Cotton Handling and Marketing. FRED TAYLOR, *Cotton Technologist*.

This work includes the investigation of the commercial processes involved in handling, marketing, and utilizing cotton in order to make recommendations as to improvements and economics; the conduct of investigational and demonstrational work connected with the organization of communities of cotton growers to market their product; and experiments regarding the advantage of growing cotton from pure seed in these communities. Studies are made to determine the value to growers of grading cotton before sale and the relative commercial value of pure-bred varieties. Methods of ginning and compressing are studied, and primary market surveys are undertaken to determine the quality and variety and range of price of both long and short staple cottons.

Scientific staff.—D. E. Earle, specialist in cotton classing; C. F. Creswell, scientific assistant; J. G. Martin, investigator in cotton marketing; A. D. Hudson, O. J. McConnell, J. H. H. Higginbotham, and C. E. Atkinson, assistants in cotton marketing; Robert A. McFarlane, assistant in cotton classing; * G. T. Brooks, assistant in cotton grading.

Cooperative Purchasing and Marketing. CHARLES E. BASSETT, *Specialist in Cooperative Organization*.

Under this project studies are made of the methods of organizing and operating cooperative marketing and purchasing associations. Specimen articles of incorporation, constitutions, and by-laws have been collected for the different kinds of marketing and purchasing organizations, and, where advisable, assistance is given to groups intending to organize.

Scientific staff.—O. B. Jesness, assistant in cooperative organization; J. M. Mehl, investigator in cooperative purchasing; F. S. Ruggles, investigator in cooperative marketing; Theo. Wade, investigator in cooperative organization.

Market Surveys, Methods, and Costs. WELLS A. SHERMAN, *Specialist in Market Surveys*.

Surveys are made to determine supplies available for market, rate of movement, outlets, and prices of specific products by definite trade areas. Questions of supply and demand for certain crops in specific markets are being studied, as is the relation of prices to market receipts and of consumption to prices. Methods of wholesale and retail distribution are being investigated, and a systematic study of the causes underlying price fluctuation has been planned.

Based upon mail reports of shipments received from practically all of the transportation lines in the country, statistics are being compiled to show the number of cars of some 80 perishable commodities shipped daily from each station in the country. Monthly reports of the cold-storage holdings of barreled and boxed apples, butter, cheese, case and canned eggs, 25 kinds of frozen fish, 5 classes of poultry, and 6 classes of meat and lard are issued in cooperation with the project "Transportation and storage."

Scientific staff.—O. W. Schleussner, specialist in marketing perishable products; J. W. Fisher, jr., and J. H. Collins, investigators in market surveys; Paul Froehlich and Edwin W. Stillwell, assistants in market surveys; and C. W. Kitchin, market station assistant.

Market Grades and Standards. W. M. SCOTT, *Specialist in Fruit Grading and Standardization*, and C. T. MORE, *Specialist in Market Grades and Standards*.

To secure national uniformity in market grades, standards, weights, measures, packages, and trade names is the object of this work. It involves a careful study of present methods of grading and packing perishable products and of packages used and the development of improved methods and containers. Growers and shippers are encouraged to prepare their crops so that they may be efficiently and profitably marketed. The construction, equipment, and management of fruit and vegetable packing houses are being studied to determine the plans and methods best suited to various crops and conditions. The elimination of present wastes and losses caused by the faulty preparation of perishables for market is sought. Emergency work in grading and handling fruits and vegetables is described under "Emergency activities."

Scientific staff.—Hartley E. Truax, W. F. Allewelt, F. E. Parsons, and S. W. Shear,* scientific assistants in marketing and distribution; Harry C. Hetzel and N. Menderson, assistants in grades and standards; T. W. Ayres, E. F. McKune, F. G. Robb, and S. H. Boddinhouse, investigators in marketing; M. M. Stewart, assistant in market surveys; J. J. Morse and Manley Stockton, assistants in marketing fruits and vegetables.

City Marketing and Distribution. G. V. BRANCH, *Specialist in City Marketing*.

Investigations under this head are carried on in many of the larger cities of the country. In studying the problems involved in the provisioning of urban populations with perishable foodstuffs, the possibilities of more direct, efficient, and satisfactory dealing through the medium of wholesale and retail public markets and wholesale terminal markets of various types are being investigated. The advantages of various other methods of city distribution are being studied and designs and estimates of the cost of model but economical market structures fully equipped with modern facilities for the efficient and sanitary handling of food products are made. When local conditions warrant, upon request of responsible organizations in cities, marketing surveys are made and suggestions and general information given regarding possible improvements.

A local market reporting service is being developed in a number of cities wherein co-operatively employed agents tabulate receipts and prices on local farmers' markets and prepare market reports written in a popular manner for the housewife which are published in the local press. This work is carried on largely under emergency funds (see "Emergency activities").

Scientific staff.—McFall Kerbey, assistant; and Achsah Lippincott and H. E. Larsen, assistants in city marketing investigations; William H. Darrow, scientific assistant in marketing and distribution.

Transportation and Storage. G. C. WHITE, *Specialist in Charge of Transportation*.

In this section commercial problems involved in the transportation and storage of farm products are investigated; the operation of special market trains and the development of boat service and of freight service by interurban electric lines are encouraged; the greater needs of producers and distributors are called to the attention of carriers; producers and shippers are impressed with their joint responsibility with carriers in the safe transportation of their products to market; shippers are urged to cooperate with carriers in alleviating car shortages by loading cars more heavily, by loading and unloading cars promptly, and by placing diversion orders at diversion points prior to the arrival of cars.

Data are secured relative to the quantity and kinds of foodstuffs held in storage and the length of time they are held, and costs of construction of storage plants, as well as operating costs and trade practices are studied, the information obtained in this connection being utilized in formulating laws governing the movement and prices of storage stocks. Data relative to the amount of commercial storage space available in the United States are compiled. In cooperation with the project, "Market surveys, methods, and costs," monthly reports are issued regarding the cold-storage holdings of barreled and boxed apples, butter, cheese, case and canned eggs, 25 kinds of frozen fish, 5 classes of poultry, and 6 kinds of meat and lard.

Scientific staff.—I. C. Franklin, specialist in storage; N. A. Hardin, investigator in food surveys; E. R. Gassman, W. M. Winter, F. M. Patton, and B. M. Hebard, assistants in transportation.

Miscellaneous Problems in Marketing and Cooperation.

Under this project study is made of new lines of work relating to the organization of rural communities, and of the preparation, handling, preservation, and marketing of animal, food, and miscellaneous products not specifically provided for under other projects; and cooperation with those governmental agencies already conducting investigations in the marketing of specific products is provided for.

Marketing by Parcel Post and Express. LEWIS B. FLOHR, *Investigator in Marketing by Parcel Post.*

Experiments are being made to determine to what extent the parcel post and the services of the commercial express companies may be utilized profitably in marketing farm and nonmanufactured food products, especially in conveying them from producer to consumer direct. Various types and makes of containers are being used in making experimental shipments of nearly all classes of farm products, including extensive shipments of butter, eggs, fruits, and vegetables. Systems for bringing rural producers and urban consumers into contact and for establishing their business relationships on a proper basis are being worked out (see "Emergency activities").

Scientific staff.—John W. Law, Frank D. McClure, C. C. Hawbaker, and Harold M. Strand, assistants in marketing by parcel post.

Marketing Live Stock, Meats, and Animal By-Products. LOUIS D. HALL, *Specialist in Marketing Live Stock and Meats.*

A systematic study of existing live-stock markets and systems of marketing is in progress, including transportation facilities and agencies for distribution of live stock and meats. This involves an investigation of methods and costs of marketing live stock and meats through centralized markets and local agencies; a compilation of information relative to the centralized markets, their capacity, equipment, and characteristics; a study of market classes and grades at the different points; and the collection and distribution of information relative to current market supplies and prices of live stock and meats. The marketing of wool is being studied, and reports dealing with the supply of wool are issued.

Scientific staff.—M. Y. Griffin, A. B. Smeby, C. V. Whalin, T. R. H. Wright, G. H. Dacy, and C. A. Burmeister, assistants in marketing; G. T. Willingmyre, specialist in marketing wool; and H. W. Metzger, investigator in wool warehousing.

Market Business Practice. G. A. NAHSTOLL, *Investigator in Market Business Practice, Acting in Charge.*

The object of this work is to investigate the business practices of cooperative and farmers' marketing, distributing, purchasing, and rural business organizations and other marketing agencies, with special reference to their accounting systems and methods of auditing, business organization, and financing, and to devise suitable accounting systems for these organizations and agencies for the purpose of increasing their efficiency.

Scientific staff.—W. W. Wright, B. B. Mason, J. H. Conn,* George O. Knapp, A. E. Warner, L. H. Van Kirk, and A. V. Swarthout, assistants in market business practice; Frank Robotka, field agent in market business practice, State of Minnesota.

Grain and Hay Marketing Investigations. GEORGE LIVINGSTON, *Specialist in Grain Marketing.*

A detailed economic study of the primary and terminal marketing of grain and hay and the marketing of such commodities to the consuming public is now in progress. This study, which includes cost of marketing, storage, warehouse practices, mixing, scalping, future trading, and other phases of the subject, is being made in order to obtain information useful to the various agencies engaged in the marketing and distribution of grain and hay, and for the purpose of offering constructive suggestions for improvement in marketing and distributing these products.

Scientific staff.—K. B. Seeds, specialist in grain marketing; Earl Chenault, A. J. Cope-land, B. Frank Stone, assistants in grain marketing; P. J. Malkerson, assistant in hay marketing; and A. R. Evans, assistant in seed marketing.

Seed Marketing Investigations. W. A. WHEELER, *Specialist in Seed Marketing.*

The purpose of this work is to conduct studies and investigations in the marketing of farm and garden seeds by growers, shippers, and dealers. A study is being made of the methods of marketing now followed, with a view to suggesting improvements in such methods, both to seed growers and to seed dealers. Studies of methods of cleaning seeds, other methods of preparing seeds for market, kinds of cleaning machinery used, and

methods of keeping records of seed stocks by seedsmen are being planned for the ensuing year. These studies are being made in order that assistance may be given and constructive suggestions made to the various agencies handling seeds in order to aid them in more economic and efficient marketing of seeds.

Scientific staff.—G. C. Edler and W. R. Oswald, investigators in seed marketing, and R. C. Gage, assistant in seed marketing.

Marketing Cotton Seed and Its Products. FRED TAYLOR, *Cotton Technologist.*

In this work investigations are made of present methods of handling, marketing, and utilizing cotton seed and its products, with a view to suggesting means whereby improvements may be made and economies effected, and studies are conducted regarding the establishment of standard grades and the standardization of conditions under which cotton seed and its products are handled and stored. Special attention is given to the consideration of moisture content as a factor in grading. Emergency work in marketing cotton seed is described under "Emergency activities."

Scientific staff.—C. F. Creswell, scientific assistant; A. D. Hudson, assistant in cotton marketing; and James W. Hare, cotton classifier's helper.

Marketing Dairy Products. ROY C. POTTS, *Specialist in Marketing Dairy Products.*

In this work studies are made of marketing dairy products and dairy substitutes, including methods and costs of their preparation for market, market grades and classification of dairy products, market quotations and quotation systems, selling agreements, marketing facilities and methods, market requirements and conditions, producers' problems, and related subjects, in order to suggest measures by which market conditions and marketing methods may be improved and the costs of marketing dairy products reduced.

Monthly reports of the amount of manufactured milk products produced in the United States are compiled and issued. For description of the market news service on dairy products, see "Emergency activities."

Scientific staff.—Leon M. Davis, Herman F. Meyer, G. P. Warber, Alexander C. Dingwall, D. L. James, W. H. Grell, L. K. Heyd, and E. J. C. Bayliss, assistants in marketing dairy products.

Cotton Warehouse Investigations. R. L. NIXON, *Specialist in Warehousing.*

The purpose of this work is the accumulation and dissemination of useful information relating to the warehousing of cotton, insurance rates while in storage, and benefits, including better arrangements for financing, to be derived from conserving cotton in storage houses; the construction of different types of warehouses; and the relation of present methods and practices of compressing cotton to warehousing.

Scientific staff.—R. L. Newton, W. P. Daniel, and J. M. Workman, investigators in warehousing; and James P. Brown, assistant in warehouse investigations.

Foreign Marketing Investigations. C. W. MOOMAW, *Specialist in Foreign Markets Investigations.*

Under this project investigations are made of foreign markets for American farm and nonmanufactured food products, and assistance is rendered wherever possible in developing export trade in such products. Investigations are made of the export facilities at the American seaboard and beyond, and methods and costs of physically handling products intended for shipment abroad, transoceanic and foreign transportation, methods of distribution and sale in foreign countries, trade practices and preferences, and the various competitive factors encountered abroad by American producers and shippers.

Preservation of Fruits and Vegetables in Transit and Storage. H. J. RAMSEY, *Pomologist in Charge.*

These investigations are made to determine and encourage best methods of handling, shipping, and storing fruits and vegetables so as to render them less liable to deterioration and decay in storage and in transit and insure their arrival on the market in good condition.

The efficiency of refrigerator cars and equipment used in transportation, as affecting the condition of perishables in transit and on arrival at market terminals; and the relation of precooling and icing practices and methods of loading to the successful transportation of these products are investigated. The influence of temperatures, humidity, and air conditions on the keeping qualities of fruits and vegetables in refrigerated or common storage and the construction and functioning of storage warehouses are studied in this project. These investigations are conducted cooperatively by the Bureau of Markets and the Bureau of Plant Industry. Emergency work conducted by this project is described under Emergency Activities.

Scientific staff.—C. W. Mann, pomologist; S. J. Dennis, refrigeration technologist; A. W. McKay, Edwin Smith, and F. W. Allen, investigators; George L. Fischer, V. W.

Ridley, W. C. Quick, C. E. Schuster, A. F. Edminster, A. M. Grimes, D. B. Carrick, L. W. Collins, S. H. Davidson, and A. E. Nelson, scientific assistants.

Collecting and Distributing Market Information on Fruits and Vegetables.

WELLS A. SHERMAN, *Specialist in Market Surveys.*

This bureau conducts a telegraphic market news service covering the commercial movement and prevailing market prices of the principal fruit and vegetable crops. Branch offices have been established in the principal metropolitan markets, and these, in connection with temporary offices located in producing territory during crop movement, act as centers for the distribution of all available information. The information which is made public includes reports from all important markets covering receipts, market conditions, and prevailing wholesale prices; telegraphic advices from railroad officials in all parts of the country giving shipments of the commodities which are being reported; and f. o. b. information furnished by field men in shipping areas. During the major portion of the year daily bulletins are issued from the permanent city offices and from the various temporary offices in commercial producing territory. This work has been much extended by the use of emergency funds (see "Emergency activities").

Scientific staff.—O. W. Schleussner, specialist in marketing perishable products; Dudley Alleman, Herbert Graff, Rodolphus Kent,* and H. F. Walker, scientific assistants; James H. Collins, John W. Fisher, jr., R. M. Peterson, Julius Smith, Henry B. Daly, George B. Fiske, David J. Flanagan, Clyde H. Heard, Benjamin Jelinek, Albert E. Mercker, and M. L. Henry, investigators; John J. Ahearn, G. Lincoln Barber, William H. Hall, J. Harold Hoover, George M. Meyer, William M. Orr, Peter Peterson, and Edward J. Ransick, assistants in marketing fruits and vegetables; Robert L. Ringer and Marlon S. Wiggins, field assistants in marketing investigations; E. D. Baker, B. C. Boree, T. C. Bushfield, Joseph R. Cavanagh, Charles W. Chewning, Saxon D. Clark, Harold J. Clay, Elbert E. Conklin, jr., Carroll W. Dunning,* George E. Engels, A. D. Gail, jr., J. C. Gilbert, H. P. Henry, Phil C. Isbell, Bernard B. Jones, Frederick R. Keebler, Walter Kingsbury, J. P. Klein, Russell L. Lepper, Albert E. Lindquist, L. Herbert Martin, Willard H. Mosler, J. William Park, F. W. Read, Lynus C. Reynolds, Clifford R. Runyan, Ralph M. Ruffledge, Ralph H. Shoemaker,* Otis E. Simpson, Wayne M. Stevens, Edwin W. Stillwell, and W. B. Walker, assistants in market surveys; E. R. Biddle, J. K. Boyd, Louis J. Case, Don E. Crews, Leo A. Egalite, E. B. Gustafson, H. A. Harris, W. J. Hildebrandt, William P. Johnson, F. W. Kern, C. W. Kitchen, R. S. Lumbard, O. J. McDonald, E. F. McGowan, E. D. McNulty, H. E. Munger, P. J. Roach, A. W. Rolfe, Edw. M. Seifert, John J. Sullivan, William R. Thawley, William G. Thompson, C. B. Tubergen, H. H. Warner, and B. E. Yaden, market station assistants.

Market Reports on Live Stock and Meats. Louis D. HALL, *Specialist in Marketing Live Stock and Meats.*

These reports are divided into five classes: (1) Daily market reports on meat trade conditions, which show prices, supply, demand, and trend of the market for beef, veal, pork, lamb, and mutton, in Boston, New York City, Philadelphia, and Washington, D. C.; (2) daily reports on live stock loaded the day previous, west of the Allegheny Mountains, classified by destinations and tabulated by State origins for a number of the larger market centers; (3) weekly summary of the meat trade conditions which are issued each Saturday morning; (4) monthly reports of receipts of live stock at stock yards, which are issued shortly after the first of each month; and (5) reports showing monthly shipments of stockers and feeders, which are issued shortly after the first of each month and show the number of head of cattle and sheep shipped during the preceding month from some 25 market centers for feeding and grazing purposes. This work has been much extended by the use of emergency funds. See *Emergency Marketing Activities*.

Scientific staff.—F. M. Simpson, E. V. Baker, S. Bray, W. C. Davis, S. W. Doty, W. O. Ellis, W. M. Fisk, C. E. Gibbons, J. P. Mead, S. H. Ray, D. J. Slater, J. A. Burgess, J. W. Giblin, J. C. Gillilan, B. G. Hays, L. B. Mann, H. P. Morgan, G. R. Scott, D. L. Swanson,* L. I. Weil, B. M. Mace, jr., J. H. Peters, E. E. Nicolls, and D. W. Compton, assistants in marketing.

Food Supply Investigations. CHARLES S. COLE, *Investigator in Rural Organization*; LOUIS D. HALL, *Specialist in Marketing Live Stock and Meats*; GEORGE LIVINGSTON, *Specialist in Grain Marketing*.

In this work, which is carried on in cooperation with the Federal Trade Commission, effort will be made to show the character and cost of the services rendered and the profits received by various agencies handling farm products. If undue profits appear to be made by any factor or factors effort will be made to determine whether they are the result of unhindered economic laws or of manipulation and artificial control. Special attention is being paid to live stock and meats and the principal grains entering into food.

Scientific staff.—James E. Boyle, Hiram M. Currey, William L. Johns, V. E. Butler, W. F. Logan, E. H. Schroer, and Roy H. Wilcox, assistants in food supply investigations; L. H. Vankirk and W. W. Wright, assistants in market business practice; Charles V. Whalin and Turner R. H. Wright, assistants in marketing live stock and meats; and Thomas H. Summers, scientific assistant in farm management.

Investigations and Demonstrations of Cotton Standards. FRED TAYLOR, *Cotton Technologist.*

Under this head are made field and laboratory investigations and demonstrations of standards for the different grades, qualities, and conditions of cotton. Investigations are carried on regarding the ginning, grading, stapling, baling, marking, compressing, and tare of cotton. Studies are made relative to standardizing Arizona-Egyptian cotton, the length of staple of cotton, cotton of perished staple or immature staple, and gin-cut cotton, reginned cotton, and cotton linters. When practicable, grading experts demonstrate proper methods to communities of cotton growers in order to secure more uniform grading in connection with spot cotton transactions, to show to these communities the advantages of proper grading and classification of cotton before sale, and to promote the use of the official cotton standards of the United States. To the end that cotton quotations may be on a more uniform basis, grading and standardization demonstrations are conducted in certain spot markets.

Scientific staff.—George Butterworth, D. E. Earle, and R. L. Francis, specialists in cotton classing; H. C. Slade, assistant in cotton marketing; R. L. Kause and F. E. Devine, assistants in cotton classing.

Cotton Testing. FRED TAYLOR, *Cotton Technologist.*

Under this project tests are made of the waste, tensile strength, and bleaching qualities of the different grades, classes, and varieties of cotton in order to determine their commercial and spinning values. Spinning tests are being conducted on the basis of the official cotton standards of the United States, representing cotton of upland, Texas, and Gulf growths, with staple approximately fifteen-sixteenths of an inch long, purchased from representative sections of the cotton belt. The tentative grades of Arizona-Egyptian cotton grown in the Salt River Valley are being tested.

Scientific staff.—W. S. Dean, assistant in cotton testing; C. E. Coburn, C. E. Killingsworth, and George H. Anderson, assistants in cotton classing; R. V. Hellams and H. B. Richardson, assistants in agricultural technology.

Rural Credit, Insurance, and Communication. C. W. THOMPSON, *Specialist in Rural Organization.*

This work consists of the investigation and the encouragement of organization in rural communities for the purpose of obtaining better credit, insurance, and communication facilities. This includes a study of the conditions under which farmers obtain loans or credit; a study of successful organizations performing the functions of rural credit banks; the promotion of organized activity among farmers for credit improvement; the elimination of disastrous losses to farmers by the encouragement of cooperative effort in providing proper insurance facilities and in safeguarding the property against loss; and the study of various methods of securing rural telephone service and the encouragement of cooperation for this purpose.

Scientific staff.—Charles S. Cole, investigator in rural organization; V. N. Valgren, investigator in agricultural insurance; and Leon E. Truesdell, field assistant in rural organization.

Rural Social and Educational Activities. C. W. THOMPSON, *Specialist in Rural Organization.*

The object of this work is the improvement of social and educational conditions in rural communities by the accumulation and dissemination of useful information growing out of a study of the social and educational needs of typical communities, the work of their existing forms of organization, and the possibilities for improvement through organized activity. Methods of encouraging social organization activities are investigated, and study of means of improving social, economic, and educational conditions of women and children through the work of women's rural organizations is made.

Scientific staff.—Leon E. Truesdell, first assistant in rural organization; Anne M. Evans, investigator in women's rural organizations; Wayne C. Nason, assistant in rural organization.

State Cooperation in Marketing Work. J. C. SKINNER, *Investigator in Co-operative Marketing, Acting in Charge.*

The object of this work is to carry on in cooperation with the various State agricultural colleges and departments of agriculture investigational and demonstrational work

in connection with the marketing and distributing of farm products. Field agents in marketing are located in each of the cooperating States, such agents having charge of the marketing investigations and demonstrations conducted within that State.

Scientific staff.—Arkansas, J. H. Tull; Colorado, S. L. Sweet; Connecticut, Guy C. Smith; Georgia, M. C. Gay; Iowa, L. G. Foster; Kentucky, John U. Field; Minnesota, Frank Robotka; Mississippi, L. G. Mulholland; Montana, Wayland L. Beers; Nebraska, H. C. Filley; New Mexico, Charles A. McNabb; North Carolina, W. R. Camp; Oregon, Frank L. Ballard; South Carolina, F. W. Hof Mann; Tennessee, C. E. Brehm; Texas, Howard M. Eliot; Utah, Mark H. Greene; Vermont, M. R. Tolstrup; Virginia, B. C. Moomaw, jr.; Washington, Asher Hobson. In Washington, D. C., R. H. Elsworth.

Investigation and Determination of Grain Standards. J. W. T. DUVEL, *Crop Technologist*.

Investigations are made of such phases of harvesting, handling, transportation, cleaning (including the removal of smut at time of thrashing), storage, and grading of grain as contribute information fundamental and necessary for establishing, fixing, and perfecting standards for corn, wheat, rye, oats, barley, grain sorghums, flaxseed, and such other grains as the usages of the trade may warrant and justify; investigations are made of the relations of grades and standards to the feeding and manufacturing value of sound and unsound grain; also of the influence on grade of biophysical, biochemical, and physiological changes which take place in grain during harvesting, transportation, and storage. Laboratory methods for determining the condition and quality of grain are developed and perfected, as is special apparatus for use in grain grading.

Scientific staff.—L. M. Thomas, supervisor in grain inspection; George H. Baston, assistant supervisor in grain inspection; Dr. F. E. Allison, L. L. Andrews, C. H. Bennett, Alfred Christie, jr., Dr. D. A. Coleman, H. E. Earp, William L. Frank, Charles M. Fritz, W. G. Goodenow, J. D. Morgan, H. B. Musser, and S. A. Regan, scientific assistants; J. H. Shollenberger and F. B. Wise, assistants in grain standardization.

Grain Handling and Transportation Investigations. J. W. T. DUVEL, *Crop Technologist*, and GEORGE LIVINGSTON, *Specialist in Grain Marketing*.

Investigations of general and specific commercial problems connected with the handling, transportation, and storage of grain are conducted, including methods employed on the farm, at the country elevator, and at distributing and consuming centers; the effect of commercial practices on the commercial value of grain; the relation of transportation facilities to the economic and efficient marketing and distribution of grain in domestic and foreign commerce; the construction and equipment of elevators and warehouses and of such other related subjects as may furnish information useful to the various agencies engaged in the handling, transportation, storage, and merchandising of grain.

Scientific staff.—L. M. Jeffers, A. L. Rush, supervisors in grain inspection; Earl Chenault, assistant in grain marketing; and A. R. Evans, assistant in seed marketing; C. C. Ruth and Malon Yoder, scientific assistants.

Enforcement of Standard Container Act. CHARLES J. BRAND, *Chief of Bureau*.

The enforcement of the provisions of the standard container act and the regulations of the Secretary of Agriculture thereunder is carried on under this project together with the necessary investigational work.

Scientific staff.—C. T. More, specialist in market grades and standards; W. M. Scott, specialist in fruit grading and standardization; and F. P. Downing, investigator in marketing.

Enforcement of the United States Cotton Futures Act. CHARLES J. BRAND, *Chief, Bureau of Markets*.

Supervision and direction of the investigational and regulatory activities of the Bureau of Markets in connection with the enforcement of the United States cotton futures act and the rules and regulations of the Secretary of Agriculture thereunder, and such executive and clerical duties as may be necessary in connection therewith are carried on under this project.

Scientific staff.—D. S. Murph, Fred Taylor, and George R. Argo.

Determination of Disputes under the United States Cotton Futures Act. GEORGE R. ARGO, *Specialist in Cotton Business Methods*.

The object of this work is to hear and determine disputes as to the classification of cotton tendered in the settlement of future contracts made in compliance with sections 5 and 6A of the cotton futures act, and referred to the Secretary of Agriculture under the terms of the act; and to prepare the findings of the Secretary.

Scientific staff.—R. L. Francis, M. F. Stiles, George Butterworth, and A. M. Agelasto, specialists in cotton classing; H. C. Slade and R. A. Freret, assistants in cotton marketing.

Investigation of Future and Spot Markets for Cotton under the United States Cotton Futures Act. GEORGE R. ARGO, *Specialist in Cotton Business Methods.*

Under this head investigations are made of future markets for cotton to ascertain how accurately their future quotations reflect spot values, and to secure general information as to conditions within the future exchanges; markets are studied to determine their fitness for designation as bona fide spot markets; reliable quotations are secured daily from each of the designated spot markets; and the markets are inspected from time to time to see that they conform to the necessary conditions.

Scientific staff.—M. F. Stiles, specialist in cotton classing; R. Kohlheim, assistant in cotton classing.

Preparation and Distribution of the Official Cotton Standards of the United States under the United States Cotton Futures Act. FRED TAYLOR, *Cotton Technologist.*

In this section is done the work of preparing and distributing the official cotton standards of the United States; of inspecting and condemning these standards when necessary; and replacing them upon request.

Scientific staff.—D. E. Earle and Fred W. Knight, specialists in cotton classing; H. C. Slade, assistant in cotton marketing; R. L. Krause, J. B. Beers, G. P. Taylor, H. E. Tucker, and N. H. Willbanks, assistants in cotton classing; R. F. Currin, N. T. Bringhurst, and J. G. Barron, assistants in cotton grading.

Enforcement of the United States Grain Standards Act. CHARLES J. BRAND, *Chief, Bureau of Markets.*

Supervision and direction of the investigational and regulatory activities involved in the enforcement of the United States grain standards act, and the rules and regulations of the Secretary of Agriculture thereunder and such executive and clerical duties as may be necessary in connection therewith are carried on under this project.

Scientific staff.—George Livingston, specialist in grain marketing; J. W. T. Duvel, crop technologist.

Determination of Dispute and Appeal Cases under the United States Grain Standards Act. E. G. BOERNER, *Grain Supervisor.*

Appeals from inspections and gradings of grain sold, offered for sale, or consigned for sale by grade, and shipped or delivered for shipment in interstate or foreign commerce, and disputes as to the grade of grain sold, offered for sale, or consigned for sale by grade and shipped or delivered for shipment in interstate or foreign commerce, without inspection under the provisions of the act, are determined and the findings in each case prepared and issued.

Scientific staff.—C. A. Russell, W. J. O'Loughlin, J. M. Chilton, H. J. Besley, grain supervisors; P. J. Bollman, assistant grain supervisor.

Licensing of Inspectors under the United States Grain Standards Act. GEORGE LIVINGSTON, *Specialist in Grain Marketing.*

The object of this work is to determine the competence of persons applying for license to inspect and grade grain under the provisions of the United States grain standards act, and to issue to qualified persons licenses to inspect and grade grain and to certificate the grade thereof. Licenses are suspended or revoked for cause, in accordance with the provisions of the act.

Scientific staff.—Fred G. Smith, grain supervisor.

Supervision of Inspection under the United States Grain Standards Act. GEORGE LIVINGSTON, *Specialist in Grain Marketing.*

Supervision of the inspection and grading of grain shipped or delivered for shipment in interstate or foreign commerce and which is sold, offered for sale or consigned for sale by grade, is handled by this project. The supervision work is conducted through 35 offices of Federal grain supervision in the field. The rules and regulations of the Secretary of Agriculture, covering the inspection and grading of grain, the shipment of grain by grade without inspection between noninspection points, and the shipment of grain by type or sample, are enforced; investigations relative to the work of licensed inspectors are made and recommendations are prepared and submitted for the suspension or revocation of licenses based upon such investigations. Reports regarding the shipment and inspection of grain moving in interstate and foreign commerce are compiled and published.

Scientific staff.—Harold Anderson, Charles B. Barron, H. J. Besley, Ralph H. Brown, C. L. Cannon, William P. Carroll, John T. Cavanagh, John H. Cox, Laurel Duval, John H. Edwards, Walter Fowler, C. G. Franks, H. H. Gear, Charles F. Hegwein, Edward J. Hickey, Robert D. Jarboe, L. M. Jeffers, Ed. Keiser, James A. Leroy, E. H. Linzee, Hugh A. Martin, William H. McDonald, R. T. Miles, Robert C. Mill, R. C. Miller, E. L. Morris, C. E. Munn, V. L. Nigh, E. C. Noll, Philip Rothrock, R. D. Saunders, John Sheedy, Oscar L. Spencer, B. J. Stubblefield, Fred L. Wallace, Bert W. Whitlock, grain supervisors; P. J. Brittain, specialist in grain exchange practice; A. W. Herger, assistant in Federal grain supervision; Lee Gallaher, E. A. Hill, John C. Kerr, James F. McKinzie, Asa B. Parker, O. F. Phillips, Harry A. Rhoades, William F. Shanahan, Ralph B. Woolsey, Clarence B. Wright, assistant grain supervisors.

Administration of the United States Warehouse Act. CHARLES J. BRAND,
Chief, Bureau of Markets.

The purpose of this work is to inspect and classify warehouses applying for licenses under the United States warehouse act; to license warehouses that are found to be suitable for the proper storage of cotton, grains, flaxseed, wool, and tobacco; to license weighers and graders desiring to weigh and grade agricultural products to be stored in warehouses licensed under this act; to license any person not a warehouseman to accept custody of cotton, grains, flaxseed, wool, and tobacco, and to store same in a warehouse owned or operated by any State; to prescribe the duties of warehousemen licensed by the Secretary of Agriculture, to make rules and regulations for carrying out the provisions of the United States warehouse act, and to prescribe the conditions of the bond required of licensed warehousemen; to investigate the storage, warehousing, classifying, according to grade or otherwise, weighing and certification of cotton, grains, flaxseed, wool, and tobacco; to establish and promulgate standards for agricultural products by which their quality or value may be judged or determined; and to make such other investigations as may be necessary for carrying out the provisions of the United States warehouse act.

Scientific staff.—D. S. Murph, specialist in cotton marketing and warehousing; R. L. Nixon, specialist in warehousing; R. L. Newton, and J. M. Workman, investigators in warehousing; J. P. Brown, R. B. Smith, S. G. Hilton, and T. L. Hughes, assistants in warehouse investigations; F. G. Crout, scientific assistant.

EMERGENCY MARKETING ACTIVITIES.

Market Report Service on Dairy and Poultry Products. CHARLES J. BRAND,
Chief of Bureau, assisted by Roy C. Potts, Specialist in Marketing Dairy Products.

These reports include data regarding market receipts, supplies, trade and market conditions, prices of dairy products, and other information which may be of value to purchasers, distributors and consumers in intelligently directing their sales and purchases of these products.

Periodic reports are obtained (a) from primary buyers and producers in the more important producing areas regarding the current production of supplies for market; (b) from the common carriers regarding shipments in transit to market and receipts at the larger and more important wholesale markets; (c) from the producers, primary buyers, wholesalers, purchasers, and retailers, regarding trade conditions and market prices of the various classes of dairy products; and (d) from these and other agencies regarding such additional matters as may be of value in connection with the marketing and distributing of dairy products.

Scientific staff.—Leon M. Davis, Herman F. Meyer, G. P. Warber, A. C. Dingwall, D. L. James, R. C. Bish, W. H. Grell, D. K. Heyd, and E. J. C. Bayliss, assistants in marketing dairy products.

Grain and Hay Market Reporting Service. CHARLES J. BRAND, *Chief of Bureau, assisted by K. B. Seeds, Specialist in Grain Marketing.*

This project is at present conducting a market news service covering the commercial movement of the principal grains and hay, stocks on hand, and the prevailing market prices of such commodities. In order to expedite the dissemination of these reports the country has been divided into 10 divisions, and reports for each division are issued from its headquarters. The information which is made public includes reports of stocks on hand, prospective receipts and shipments, and prices for grains in all sections. Special reports are also issued from time to time dealing with particular phases of the marketing of these crops.

Scientific staff.—H. L. Bowen, E. E. Elliott, and W. M. Smith, investigators in grain marketing; Joseph R. McCleskey, C. P. Martin, investigators in hay marketing; John A. Bergen, G. B. Algulre, H. A. Carr, J. P. Conley, A. Rickles, J. C. Custenborder, F. J.

Dietsch, J. N. Else, William M. King, Emile Kostal, F. R. Melbourn, Louis D. Todd, and G. C. Wheeler, assistants in grain marketing; Louis N. Ries, investigator in grain-exchange practice; E. T. Hanson and L. R. Spencer, grain supervisors; and W. C. Farrell, C. R. Ferris, A. L. Hess, H. C. Hovey, F. A. McCabe, and T. A. Sommers, assistants in hay marketing.

Market Report Service on Seed. CHARLES J. BRAND, *Chief of Bureau*, assisted by W. A. WHEELER, *Specialist in Seed Marketing*.

This service was organized to give seed growers, shippers, and dealers information regarding the seed-crop movement, receipts and shipments of seeds in large markets, available supply of seeds in hands of growers and dealers, factors indicating probable demand for seeds, trend of prices, reports of qualities of seed due to unfavorable weather conditions or other factors, etc.

Information is obtained for use by governmental agencies and the public in making preparations for increasing production and in promoting the efficient distribution of seeds and conserving the seed supply.

Scientific staff.—G. C. Edler, W. R. Oswald, and C. F. Wood, investigator in seed marketing; J. W. Bedford, R. C. Gage, W. E. Kuster, and John F. Ware, assistants in seed marketing; V. P. Fawcett, scientific assistant; J. E. Barr, assistant in seed marketing; E. F. Bullock, assistant grain sampler.

Emergency Food, Feed, Fertilizer, and Seed Surveys. CHARLES J. BRAND, *Chief of Bureau*; C. W. THOMPSON, *Leader of Project*, assisted by committee composed of: HERBERT C. MARSHALL, *Assistant Chief of Bureau*; W. A. SHERMAN, *Specialist in Market Surveys*; W. A. WHEELER, *Specialist in Seed Marketing*; C. S. POTTS, *Expert*; and G. V. BRANCH, *Specialist in City Marketing*.

Information is being secured regarding the food supply of the nation, especially the quantity of food on hand, and its location and ownership. Effort is made to ascertain the instrumentalities and agencies that own, control, manufacture, or distribute food products, and to obtain information regarding (1) stocks on hand on farms; (2) stocks in wholesale, jobbing, storing, and manufacturing and other commercial establishments; (3) stocks in retail establishments; (4) consumers' stocks. Under present plans a survey of feedstuffs will be made in the spring of 1918.

In making the fertilizer survey information will be obtained regarding, among other things, stocks of fertilizers and fertilizing materials now on hand, estimated quantity to be imported during the year ending June 30, 1918; estimated maximum producing capacity of all manufacturing establishments during that period; and estimates of the quantity of each commodity which will be used for fertilizer purposes. Figures will also be obtained for the past year for the purpose of comparison.

As a basis for conducting the Seed Reporting Service, surveys are made to determine location and amount of seed stocks, and whether held by producers, primary shippers, jobbers, or retailers; receipts and shipments at important markets; demand for seeds by consuming sections; and other matters.

Conservation of Food Products in Transportation and Storage.—CHARLES J. BRAND, *Chief of Bureau*, assisted by H. J. RAMSEY, *Pomologist in Handling and Storage Investigations*.

This work involves such matters as the demonstration of the amount of decay and deterioration of fruits and vegetables due to (a) delays prior to shipment, in transit, and at terminals; (b) faulty methods of storing in cars; (c) improper containers; (d) unnecessarily long hauls; (e) inefficient refrigerator-car construction; (f) too-long storage; (g) ill-adapted types of storage, and similar matters. Corrective measures are applied whenever possible.

Specialists in harvesting and handling fruits and vegetables conduct demonstrational work in producing sections, and advice is given to producers regarding the proper construction of storage houses and other matters. Carriers are urged to use refrigerator cars possessing increased refrigeration efficiency with a decreased use of ice.

Scientific staff.—C. W. Mann, pomologist; S. J. Dennis, refrigeration technologist; A. W. McKay, Edwin Smith, K. B. Lewis, H. S. Bird, F. W. Allen, and Louis F. Boyle, investigators; George L. Fischer, V. W. Ridley, W. C. Quick, C. E. Schuster, A. F. Edminster, H. C. Albin, Sidney H. Davidson, Vane G. Gibson, A. M. Grimes, J. R. Magness, E. W. Montell, and Harold F. Smith, scientific assistants; G. W. Baker, R. M. Ewing, H. E. Newman, and H. M. Rodgers, assistants in marketing; S. L. Van-Orman, F. A. Tenny, and H. V. Demott, inspectors.

Market Inspection of Perishable Foods. CHARLES J. BRAND, *Chief of Bureau*, assisted by C. T. MORE, *Specialist in Market Grades and Standards*; and W. M. SCOTT, *Specialist in Fruit Grading and Standardization*.

This inspection service was inaugurated November 1, 1917. Inspectors are maintained at the principal markets to investigate and certify to shippers the condition as to soundness of fruits and vegetables upon arrival at these markets. The object of this service is to establish an unbiased basis for the adjustment of differences among growers, shippers, wholesalers, and transportation companies, and to conserve the supply of fruits and vegetables by facilitating the movement and sale of these products.

Scientific staff.—E. L. Markell, supervising inspector, Northeastern Division, New York; B. B. Pratt, supervising inspector, North-Central Division, Chicago; and F. E. De Sellem, supervising inspector, Western Plains Division, Kansas City; W. F. Allewelt, scientific assistant in marketing and distribution; E. F. McKune, J. M. Mosher, S. H. Boddinhouse, C. E. Merrill, F. T. Bryan, F. H. Hunter, W. F. Selleck, H. S. Kramer, and L. G. Schultz, investigators in marketing; H. C. Lightsey, T. C. Curry, and W. V. Stephens, inspectors of fruits and vegetables; F. L. Strang, assistant in marketing fruits and vegetables; Don D. Ward, market inspector; R. C. Butner, W. C. Hackleman, A. L. Williams, G. W. Payne, S. F. Shreve, R. J. Russell, L. J. Weishaar, F. J. Baehler, F. H. Lister, F. A. L. Bloom, and others to be appointed.

Emergency Work in Grading and Handling Fruits and Vegetables.

CHARLES J. BRAND, *Chief of Bureau*, assisted by W. M. SCOTT, *Specialist in Fruit Grading and Standardization*, and C. T. MORE, *Specialist in Market Grades and Standards*.

The object of this work is to determine quickly the best methods of handling, grading, packing, and shipping such perishable crops as sweet potatoes, tomatoes, other truck crops and peanuts, and to make this information available to growers and shippers through the announcement of recommended grades, packages, and practices. Demonstrations are conducted among field marketing agents, county agents, growers, and shippers in order that the greatly increased production of these crops, especially sweet potatoes and peanuts, may be conserved and may be marketed profitably by growers to the end that the planting of large acreages may be continued.

Scientific staff.—M. M. Stewart, assistant in market surveys; E. F. McKune, F. G. Robb, F. P. Downing, S. H. Boddinhouse, and J. M. Mosher, investigators in marketing; W. F. Allewelt and S. W. Shear, scientific assistants in marketing and distribution; J. J. Morse and M. Stockton, assistants in marketing fruits and vegetables; and N. Menderson, assistant in grades and standards.

City Market Service. CHARLES J. BRAND, *Chief of Bureau*, assisted by G. V. BRANCH, *Specialist in City Marketing*.

As mentioned under "City marketing and distribution," a local market reporting service is being developed in a number of cities wherein cooperatively employed agents tabulate receipts and prices on local farmers' markets, and prepare in popular form for publication in the local press, market reports for the housewife.

Scientific staff.—McFall Kerbey and Achsah Lippincott, assistants; W. H. Darrow, Harvey E. Larsen, George P. Samman, George W. Porter, George W. Welsh, A. L. Pino, C. C. Hood, agents.

Direct Market Activities. CHARLES J. BRAND, *Chief of Bureau*, assisted by LEWIS B. FLOHR, *Investigator in Marketing by Parcel Post*.

Assistance is given so far as feasible in establishing personal contracts between producers and consumers in order to assist in marketing the surplus products of home gardens and the excess produce by truck growers and others. Agents will be placed in a number of large cities throughout the country to awaken interest in direct marketing among consumers. Agents also will work through the postmaster in small towns in interesting producers in furnishing supplies. In view of the car shortage and congestion at terminals and the great difficulty that is experienced in handling efficiently less than car-lot quantities of freight, demonstrations will be made regarding the establishment of automobile truck marketing routes.

Scientific staff.—John W. Law, Frank D. McClure, C. C. Hawbaker, assistants in marketing by parcel post.

Marketing Cotton Seed and Its Products. CHARLES J. BRAND, *Chief of Bureau*, assisted by FRED TAYLOR, *Cotton Technologist*.

In order to add to the food and feed supply of the Nation, the conditions prevailing in the cottonseed industry are investigated. To ascertain and if possible to remedy the wasteful practices that now exist, producers, ginners, seed dealers, and oil mills will be urged to store and handle seed so as to lessen damage, to facilitate the distribution of cotton seed and its products, and to utilize seed in such a way as to procure from it the largest amount of edible products. Efforts are being made to develop practical commercial cottonseed standards as a means toward the improvement of marketing conditions.

Scientific staff.—C. F. Creswell, scientific assistant; A. D. Hudson, assistant in cotton marketing; Lawrence Mason, William U. Sherrill,* cotton classer's helpers.

BOARDS AND COMMITTEES.

Insecticide and Fungicide Board.

The Insecticide and Fungicide Board, created December 22, 1910, assists the Secretary of Agriculture in the enforcement of the insecticide act of 1910.

Members.—J. K. Haywood, chairman; M. B. Waite, A. L. Quaintance, and James A. Emery; executive officer, J. G. Shibley.

Federal Horticultural Board.

The Federal Horticultural Board, created August 21, 1912, assists the Secretary of Agriculture in the enforcement of the plant quarantine act of August 20, 1912.

Members.—C. L. Marlatt, chairman; W. A. Orton, vice chairman; George B. Sudworth, W. D. Hunter, and Karl F. Kellerman; R. C. Althouse, secretary of board.

Entomological inspectors.—E. R. Sasser, H. L. Sanford, and H. F. Dietz.

Pathological inspectors.—R. Kent Beattie, C. H. Kauffman, John T. Rogers, and A. H. Gilbert.

In charge of entry of plants and plant products under restriction.—Lester E. Palmer.

PORT INSPECTION SERVICE.

This service enforces the conditions of entry with relation to cotton, nursery stock, and other plants and plant products the entry of which is regulated.

Boston office.—R. I. Smith, quarantine inspector in charge; *assistants*, J. S. P. Carpenter and Irving L. Bailey.

New York office.—H. B. Shaw, *pathologist in charge*; *assistants*, D. G. Tower and Kearn B. Brown.

Seattle office.—Alan G. Webb, *quarantine inspector in charge*.

Calxico office.—O. A. Pratt, *scientific assistant in charge*.

TEXAS-MEXICAN INSPECTION SERVICE.

The inspectors engaged in this service are charged with the enforcement of the rules and regulations prohibiting the movement of cotton and cotton seed from Mexico into the United States, and governing the entry into the United States of railway cars and other vehicles, freight, express, baggage, or other materials from Mexico at border points, to guard against the entry with such vehicles and materials of the pink bollworm of cotton. These inspectors are distributed as follows:

El Paso.—H. H. Willis, R. B. Haller, and G. G. Harris.

Eagle Pass.—J. A. Dew and H. C. Eagerton.

Laredo.—O. D. Deputy and Edgar S. Jewell.

Brownsville.—B. R. Leach.

PINK BOLLWORM ERADICATION.

This work involves the inspection of cotton fields to determine any sporadic outbreaks of the pink bollworm; in cooperation with the State concerned the clean-up of any infested fields found; the establishment of cotton-free areas at points which may have been infested as a further means of extermination and of cotton-free zones on or near the border of any State or States adjacent to Mexico to prevent natural migration and entry of the insect; and the conduct of such other work as may be necessary to prevent the establishment or spread of the pink bollworm in the United States.

Beaumont office.—W. D. Hunter, *in charge*; *plant quarantine inspectors*, W. W. Evans, W. J. Abbey, A. J. Ackerman, W. E. Ayers, H. M. Brundrett, C. P. Collier, A. R. Cruse, R. J. Fiske, E. W. Geyer, C. C. Halbedl, W. K. Hanson, H. S. Hensley, P. A. Hoidale, R. W. Holbert, F. L. Hutton, H. M. Jones, L. F. Locke, R. B. McKeown, H. C. Millender, M. I. Miller, Walter Ohlendorf, A. H. Preston, F. S. Puckett, R. R. Rosa, D. E. Royder, J. P. Royder, H. P. Smith, S. D. Smith, C. H. T. Townsend, Karl H. Townsend, J. E. Webb, W. D. Whitcomb, J. C. Woodward, and F. A. Messick.

PINK BOLLWORM WORK IN MEXICO.

A field station for the investigation of the life history of the pink bollworm of cotton has been established in the Laguna region at Gomez Palacio, Durango, Mexico. It is also proposed to conduct surveys in Mexico to determine the distribution of the pink

bollworm in that country and, in cooperation with the Mexican Government or local Mexican authorities, to conduct clean-up operations in an effort to exterminate this insect.

Research laboratory.—August Busck, *entomological assistant in charge*; assistants, Eduardo G. Tejada, U. C. Loftin, and K. B. McKinney.

COLLABORATORS OF THE BOARD.

Some 70 State officials connected with plant quarantine and control work have been appointed collaborators of the Federal Horticultural Board to assist in the enforcement of the various quarantine and regulatory orders issued under the Plant Quarantine Act.

Committee on the Editing of the Journal of Agricultural Research.

The Journal of Agricultural Research publishes technical papers giving the results of the various lines of research carried on by the department or by the State agricultural experiment stations. The selection of the papers and the conduct of the Journal are intrusted to this committee.

Members.—K. F. Kellerman (chairman); E. W. Allen and C. L. Marlatt for the Department of Agriculture; Raymond Pearl (Maine), H. P. Armsby (Pennsylvania), and A. M. Freeman (Minnesota) for the Association of American Agricultural Colleges and Experiment Stations; I. I. Denison, editorial clerk.

INDEX OF NAMES.

PART I.

- Aamodt, Olaf S., 19.
 Abbe, Cleveland, jr., 8.
 Abbey, W. J., 53.
 Abbott, J. S., 23.
 Abbott, W. S., 29.
 Ackerman, A. J., 29, 52.
 Adams, C. H., 17.
 Adams, E. L., 19.
 Adams, E. Q., 23.
 Adans, Frank., 41.
 Agee, J. H., 28.
 Agelasto, A. M., 49.
 Ahearn, John J., 46.
 Aicher, L. C., 19.
 Ainslie, C. N., 29.
 Ainslie, G. G., 29.
 Ainsworth, T. L., 40.
 Albin, H. C., 51.
 Alderman, E. S., 40.
 Aldrich, J. M., 29.
 Alexander, William H., 9.
 Alguire, G. B., 50.
 Allard, H. A., 20.
 Alleman, Dudley, 46.
 Allen, E. W., 36, 54.
 Allen, F. W., 45.
 Allen, L. J., 12.
 Allen, R. W., 21.
 Allen, T. Warren, 39.
 Allewelt, W. F., 43, 52.
 Allison, Dr., F. E., 48.
 Alps, Henry F., 9.
 Alsberg, Carl L., 23.
 Alter, J. Cecil, 10.
 Althouse, R. C., 53.
 Alvord, C. H., 38.
 Ambler, J. A., 23.
 Ames, F. E., 17.
 Ames, H. A., 31.
 Anderson, A. C., 28.
 Anderson, A. P., 40.
 Anderson, B. A., 41.
 Anderson, G. G., 14.
 Anderson, George H., 47.
 Anderson, Harold, 50.
 Anderson, M. S., 27.
 Ankeney, Wm. M., 18.
 Andrews, Frank, 35.
 Andrews, L. L., 48.
 Arey, J. A., 11.
 Argo, George R., 48, 49.
 Armington, John H., 9.
 Armsby, H. P., 11, 54.
 Armstrong, A. K., 16.
 Arnold, J. H., 6.
 Arnold, Joseph H., 34.
 Arzberger, Emil G., 20.
 Ashbrook, F. G., 10.
 Ashby Wallace, 41.
 Ashe, W. W., 16.
 Ashley, Alex. McC., 6.
 Atkins, S. W., 31.
 Atkinson, C. E., 42.
 Atwater, E. F., 31.
 Atwater Helen W., 39.
 Atwater, R. S., 22.
 Aune, Beyer, 21.
 Ausen, J., 11.
 Averill, E. F., 32.
 Ayers, Ed. L., 18.
 Ayers, Quincy C., 42.
 Ayers, S. H., 11.
 Ayers, W. E., 53.
 Ayres, T. W., 43.
 Babcock, C. J., 11.
 Babcock, O. G., 31.
 Back, E. A., 30.
 Bacon, Charles W., 20.
 Badger, C. H., 26.
 Baehler, F. J., 52.
 Bailey, H. H., 33.
 Bailey, H. S., 25.
 Bailey, Ilena M., 39.
 Bailey, Irving L., 53.
 Bailey, L. H., 25.
 Bailey, R. V., 42.
 Bailey, Vernon, 32.
 Bain, J. B., 11.
 Baird, W. P., 21.
 Balros, M. B., 26.
 Baker, A. C., 29.
 Baker, E. D., 46.
 Baker, E. V., 46.
 Baker, G. W., 51.
 Baker, H. E., 11.
 Baker, O. E., 6.
 Balch, R. T., 23.
 Balcom, R. W., 24.
 Balcomb, Kenneth C., 40.
 Baldwin, Mark, 28.
 Ball, Carlton R., 19.
 Ball, J. S., 6.
 Ball, John W., 40.
 Ballard, C. M., 13.
 Ballard, Frank L., 48.
 Ballard, W. S., 18.
 Bancroft, W. F., 33.
 Barber, E. R., 29.
 Barber, G. Lincoln, 46.
 Barber, H. W., 38.
 Barger, H. S., 31.
 Barger, J. A., 12.
 Barmeier, Harry, 33.
 Barnard, H. E., 27.
 Barnes, Will C., 14.
 Barnett, Claribel R., 35.
 Barney, W. B., 27.
 Barnhouse, E. L., 27.
 Barott, H. G., 39.
 Barr, J. E., 51.
 Barrett, E. L., 29.
 Barrett, L. A., 17.
 Barrios, E. P., 30.
 Barron, Charles B., 50.
 Barron, J. G., 49.
 Barron, William E., 9.
 Barrows, Harry H., 42.
 Barrows, W. B., 15.
 Bartholemew, C. E., 31.
 Bartlett, J. W., 11.
 Bassett, Charles E., 42.
 Baston, George H., 48.
 Batchelor, M. E., 22.
 Bateman, Ernest, 16.
 Bateman, G. F., 32.
 Bateman, R. E., 32.
 Baughman, W. F., 26.
 Baxter, Ora C., 42.
 Bayer, C. J., 32.
 Bayliss, E. J. C., 45, 50.
 Bayly, Lyster G., 40.
 Beagles, Robert L., 22.
 Beal, W. H., 36.
 Beals, Edward A., 9.
 Bean, H. N., 31.
 Bean, Roy P., 22.
 Beattie, James H., 22.
 Beattie, R. Kent, 53.
 Beck, Miles W., 28.
 Beckerman, Bernard, 22.
 Beckett, Samuel H., 41.
 Beckwith, Angie M., 18.
 Bedford, J. W., 51.
 Beebe, L. L., 41.
 Beers, J. B., 49.
 Beers, Wayland L., 48.
 Bell, G. Arthur, 10.
 Bell, W. B., 32.

- Belz, J. O., 20.
 Bender, W. A., 26.
 Benner, W. G., 12.
 Bennet, C. M., 6.
 Bennet, Charles D., 20.
 Bennet, H. H., 28.
 Bennett, C. H., 48.
 Benson, E. F., 27.
 Benson, O. H., 38.
 Benton, Ralph, 33.
 Berg, W. N., 12.
 Bergen, John A., 50.
 Bergman, H. F., 18.
 Besley, H. J., 49, 50.
 Betts, H. S., 15.
 Betts, M. C., 41.
 Beyer, A. H., 29.
 Biddle, E. R., 46.
 Bidwell, G. L., 25.
 Biggar, H. Howard, 20.
 Billings, G. A., 6.
 Binnal, F. C., 28.
 Birkner, V., 24.
 Bish, R. C., 50.
 Bishop, H. K., 40.
 Bishopp, F. C., 31.
 Bisset, D. A., 22.
 Bisset, Peter, 22.
 Bixby, Frederick L., 41.
 Bixby, James O., 15.
 Black, Otis F., 19.
 Blair, R. E., 21.
 Blaisdell, H. L., 31.
 Blakeslee, E. B., 29.
 Blatherwick, N. R., 11.
 Bliss, George S., 10.
 Bloom, F. A. L., 52.
 Bloxom, T. T., 33.
 Blundon, Benjamin A., 8.
 Blystone, Montello E., 10.
 Boddinhouse, S. H., 43, 52.
 Boeger, E. A., 6.
 Boerner, E. G., 49.
 Boettcher, A. B., 34.
 Bohart, G. S., 23.
 Bollman, P. J., 49.
 Bomboy, J. W., 28.
 Bondy, Floyd F., 28.
 Bonner, Frank E., 16.
 Bonner, Vernon L., 40.
 Bonsteel, J. A., 28.
 Booth, W. B., 42.
 Borden, A. D., 29.
 Borden, N. H., 25.
 Borce, B. C., 46.
 Boving, A. G., 30.
 Bowen, H. L., 50.
 Bowen, J. E., 11.
 Bower, L. J., 29.
 Bowman, H. C., 26.
 Bowman, Ralph M., 40.
 Boyce, John S., 18.
 Boyd, George R., 42.
 Boyd, J. K., 46.
 Boyd, W. E., 36.
 Boyden, W. M., 27.
 Boykin, L. E., 40.
 Boyle, C. W., 5.
 Boyle, James E., 47.
 Boyle, M., 23.
 Brabdes, E. W., 37.
 Braman, W. W., 11.
 Branch, F. H., 6.
 Branch, G. V., 43, 51, 52.
 Brand, Charles J., 20, 42, 48, 49, 50, 51, 52.
 Brandenburg, Frederick H., 9.
 Brandon, Benjamin F., 10.
 Brandon, Joseph F., 21.
 Braun, G. E., 11.
 Braun, Harry, 17.
 Brauns, D. K., 23.
 Bray, S., 46.
 Breazeale, James F., 20.
 Breczley, Benj. J., 40.
 Brehm, C. E., 48.
 Breinhart, E. G., 20.
 Breininger, C. B., 12.
 Breithaupt, L. R., 19.
 Brenner, H. G., 21.
 Brett, George W., 13.
 Brewster, J. F., 23.
 Briggs, G., 37.
 Briggs, Lyman J., 20.
 Brigham, Reuben, 36.
 Bright, Jos. F., Jr., 40.
 Bringham, N. T., 49.
 Brinsmade, J. C., Jr., 19.
 Brittain, P. J., 50.
 Brodie, D. A., 6.
 Bronson, D. D., 14.
 Brookbank, R. E., 12.
 Brooks, Charles, 18.
 Brooks, F. E., 29.
 Brooks, G. T., 42.
 Brooks, Walter F., 40.
 Brown, Bailey E., 19.
 Brown, C. B., 21.
 Brown, Chas. L., 40.
 Brown, D. E., 20.
 Brown, Edgar, 20.
 Brown, Ernest B., 20.
 Brown, Fredk. W., 28.
 Brown, H. H., 24.
 Brown, H. R., 24.
 Brown, J. J., 26.
 Brown, J. P., 50.
 Brown, James P., 45.
 Brown, Kearn B., 53.
 Brown, Nellie A., 17.
 Brown, Ralph H., 50.
 Brown, Robert A., 40.
 Brown, Rodney D., 40.
 Brundrett, H. M., 53.
 Brush, W. D., 15.
 Bryan, Arthur A., 20.
 Bryan, F. T., 52.
 Bryan, H., 28.
 Bryan, Mary K., 17.
 Bryant, E. S., 14.
 Bryson, H. K., 27.
 Buchanan, L. L., 32.
 Buchbinder, H. E., 23.
 Buck, C. J., 17.
 Buck, J. M., 12.
 Buckley, John S., 12.
 Bullen, J. T., 40.
 Bullock, E. F., 51.
 Bunnemeyer, Bernard, 10.
 Burgess, A. F., 31.
 Burgess, J. A., 46.
 Burgess, J. M., 11.
 Burgwald, L. H., 11.
 Burke, H. E., 30.
 Burke, T. T. A., 28.
 Burmeister, C. A., 44.
 Burnet, W. C., 23.
 Burnett, L. C., 19.
 Burns, Findley, 13.
 Burns, William H., 21.
 Burrell, B. H., 40.
 Burt, George J., 20.
 Burton, E. F., 11.
 Buschnell, T. M., 28.
 Busck, August, 54.
 Bushfield, T. C., 46.
 Butler, Ovid M., 16.
 Butler, V. E., 47.
 Butner, R. C., 52.
 Butterfield, E. C., 22.
 Butterworth, George, 47, 49.
 Byars, L. P., 18.
 Byrnes, E. M., 22.
 Caffrey, D. J., 29.
 Calderwood, Howard N., 16.
 Calkins, H. A., 40.
 Calvert, Edgar B., 7.
 Cammack, F. R., 11.
 Camp, W. B., 19.
 Camp, W. R., 48.
 Campbell, A. B., 20.
 Campbell, Esten W., 19.
 Campbell, H. C., 12.
 Campbell, R. E., 30.
 Campbell, W. G., 23.
 Campen, Geo. L., 40.
 Cannon, C. L., 50.
 Cannon, H. B., 11.
 Cantwell, G. G., 33.
 Capes, Charles F., 40.
 Cardon, P. V., 19.
 Carey, Austin, 14.
 Carlton, Mark A., 19.
 Carothers, J. N., 28.
 Carpenter, C. W., 37.
 Carpenter, E. J., 28.
 Carpenter, J. C., 40.
 Carpenter, J. S. P., 53.
 Carr, H. A., 50.
 Carrero, J. O., 37.
 Carrick, D. B., 46.
 Carrier, Lyman, 21.
 Carroll, Charles C., 10.
 Carroll, William P., 50.
 Carsner, Eubanks, 21.
 Carter, E. E., 14.
 Carter, W. T., Jr., 28.
 Cartwright, W. B., 29.
 Case, Louis J., 46.

- Cash, Edith J., 18.
 Cash, Lillian C., 17.
 Cassidy, Tom P., 28.
 Cates, H. R., 21.
 Cates, Junius S., 6.
 Cathcart, C. S., 27.
 Cattron, E. S., 33.
 Caudell, A. N., 31.
 Cavanagh, John T., 50.
 Cavanaugh, Joseph R., 46.
 Cave, H. W., 11.
 Cecil, George H., 17.
 Chace, E. M., 26.
 Chamberlin, Frank S., 28.
 Chamberlin, T. R., 29.
 Chambers, C. L., 38.
 Chambers, J. L., 42.
 Chambers, W. E., 20.
 Chambliss, C. E., 19.
 Champlain, A. B., 30.
 Chapin, E. A., 32.
 Chapin, R. M., 10.
 Chaplin, E. L., 11.
 Chapman, H. H., 17.
 Chappel, George M., 9.
 Charles, Vera K., 18.
 Chase, Agnes, 21.
 Cheatham, C. W., 40.
 Cheesman, W. H., 31.
 Chenault, Earl, 44, 48.
 Cheney, M. M., 6.
 Chernoff, L. H., 23.
 Chesnut, V. K., 5, 25.
 Chewning, Charles W., 46.
 Chilcott, E. C., 21.
 Chilcott, E. F., 21.
 Childs, O. W., 40.
 Childs, Ross A., 19.
 Chilton, J. M., 49.
 Ching, K. A., 37.
 Chittenden, F. H., 30.
 Christie, Alfred, jr., 48.
 Christopher, Carl, 22.
 Chubbuck, Levi, 6.
 Church, C. G., 26.
 Church, Lillian, 6.
 Church, M. B., 24.
 Clapp, Earle H., 15.
 Clark, C. C., 7.
 Clark, C. H., 19.
 Clark, Charles F., 22.
 Clark, E. D., 23.
 Clark, H. H., 6.
 Clark, J. A., 19.
 Clark, Saxon D., 46.
 Clark, W. B., 18.
 Clark, W. M., 11.
 Clarke, G. C., 40.
 Clarke, I. D., 24.
 Clarke, W. F., 23.
 Clawson, A. B., 12.
 Clay, Harold J., 46.
 Clay, J. S., 40.
 Cleary, Francis J. P., 34.
 Cleasby, E. A., 33.
 Clement, C. E., 11.
 Clement, G. E., 15, 31.
 Clemmer, H. J., 21.
 Clemmer, P. W., 11.
 Clemons, W. D., 32.
 Clency, Lois M., 22.
 Clevenger, J. F., 25.
 Clevenger, W. I., 11.
 Cline, Isaac M., 9.
 Cline, L. E., 22.
 Clinton, L. A., 38.
 Close, C. P., 21, 38.
 Clothier, R. W., 6.
 Coad, B. R., 28.
 Cobb, Francis E., 21.
 Cobb, N. A., 20.
 Cobb, W. T., 28.
 Cobbs, John L., jr., 13.
 Coburn, C. E., 47.
 Cockerham, K. L., 30.
 Coe, H. S., 21.
 Coffin, P. S., 31.
 Cogswell, W. F., 27.
 Cohenour, H. H., 11.
 Colcord, Mabel, 28.
 Cole, Charles S., 46, 47.
 Cole, F. R., 30.
 Cole, Grace M., 20.
 Cole, Harvey S., 9.
 Cole, J. S., 21.
 Coleman, Dr. D. A., 48.
 Coleman, J. G., 23.
 Colley, Reginald H., 18.
 Collier, C. P., 53.
 Collins, C. W., 31.
 Collins, G. N., 19.
 Collins, J. Franklin, 18.
 Collins, J. H., 43.
 Collins, James H., 46.
 Collins, L. W., 46.
 Collins, W. A., 31.
 Collins, W. D., 23.
 Compton, D. W., 46.
 Comstock, Salome M., 20.
 Cone, V. M., 41.
 Conklin, Elbert E., jr., 46.
 Conley, J. P., 50.
 Conn., J. H., 44.
 Connet, H., 25.
 Connor, L. G., 6.
 Connor, Margaret, 22.
 Conover, C., 23.
 Converse, H. T., 11.
 Conway, W. H., 38.
 Copeland, A. J., 44.
 Cook, C. H., 11.
 Cook, F. C., 25.
 Cook, J. A., 41.
 Cook, O. F., 19.
 Cook, W. M., 38.
 Cooley, J. S., 18.
 Cooley, M., 23.
 Cooley, R. B., 11.
 Cooper, M. R., 6.
 Corbett, L. C., 22.
 Corbett, Louis L., 21.
 Cosler, A. S., 16.
 Cotton, J. S., 6.
 Cotton, W. E., 13.
 Couch, J. F., 12.
 Court, J. C., 11.
 Courtney, O. K., 30.
 Cousins, A. H., 17.
 Coville, Frederick V., 21.
 Cowan, J. H., 37.
 Cox, Henry J., 9.
 Cox, John H., 50.
 Cox, W. P., 17.
 Craig, H. K., 40.
 Craig, W. T., 19.
 Craighead, F. C., 30.
 Crandall, W. C., 28.
 Crane, Edward, 35.
 Crawford, L. B., 32.
 Crawley, C. J., 28.
 Crawley, Howard, 13.
 Creech, G. T., 12.
 Creel, C. W., 29.
 Cressy, Chas. R., 16.
 Creswell, C. F., 42, 45, 53.
 Creswell, Mary E., 38.
 Crews, Don E., 46.
 Crick, J. G., 32.
 Crisswell, J. H., 22.
 Crocker, William, 19.
 Cron, A. B., 21.
 Cronin, P. D., 6.
 Crosby, M. A., 6.
 Crossland, Wm. A., 40.
 Crossman, S. S., 31.
 Crouch, W. E., 32.
 Crout, F. G., 50.
 Crumb, S. E., 28.
 Crumbine, S. J., 27.
 Cruse, A. R., 53.
 Crux, J. E., 41.
 Culver, J. J., 29.
 Currey, Hiram M., 47.
 Currie, J. N., 11.
 Currie, Rolla P., 31.
 Currin, R. F., 49.
 Curry, T. C., 52.
 Curtice, Cooper, 13.
 Curtin, C. W., 29.
 Curtis, Ernest W., 21.
 Cushman, R. A., 29.
 Custenborder, J. C., 50.
 Dachnoski, Alfred P., 19.
 Dacy, G. H., 44.
 Dadisman, A. J., 6.
 Dahlberg, A. O., 11.
 Daingerfield, Lawrence H., 10.
 Dale, J. K., 23.
 Dalton, Charles F., 27.
 Daly, Henry B., 46.
 Dana, S. T., 15.
 Daniel, W. P., 45.
 Daniels, A. M., 41.
 Darrow, George M., 22.
 Darrow, W. H., 52.
 Dandt, H. W., 24.
 Daugherty, Charles M., 35.
 Davidson, J., 25.
 Davidson, S. H., 46.
 Davidson, Sidney H., 51.

- Davidson, W. M., 29.
 Davis, Fred A., 40.
 Davis, H. P., 11.
 Davis, J. J., 29.
 Davis, L. C., 28.
 Davis, Leon M., 45, 50.
 Davis, R. O. E., 27.
 Davis, Robert L., 20.
 Davis, W. C., 46.
 Davis, W. P., 11.
 Day, L. Enos, 12.
 Day, Preston C., 8.
 De Bord, G. G., 24.
 De Sellem, F. E., 52.
 Dean, H. K., 21.
 Dean, W. S., 47.
 Dearborn, Ned, 32.
 Deardorff, C. E., 28.
 Dearing, George W., 22.
 Dechant, H. P., 6.
 Deeter, E. B., 28.
 Demott, H. V., 51.
 Demuth, G. S., 31.
 Dennis, S. J., 45, 51.
 Denison, I. I., 54.
 Denny, F. E., 26.
 Denson, Lee A., 9.
 Deputy, O. D., 53.
 Detwiler, Samuel B., 18.
 Deuel, H. J., Jr., 39.
 Devine, F. E., 47.
 Dew, J. A., 53.
 Dewey, George W., 22.
 Dewey, L. H., 20.
 Deysher, E. F., 11.
 Diemer, M. E., 16.
 Diesem, H. C., 41.
 Dietsch, F. J., 50.
 Dietz, H. F., 53.
 Diffenbach, R., 16.
 Dille, Alvin, 36.
 Dille, F. M., 33.
 Dillman, A. C., 21.
 Dillon, W. Roy, 31.
 Dingwall, A. C., 50.
 Dingwall, Alexander C., 45.
 Dinsmore, Sanford C., 27.
 Ditlewig, George, 11.
 Dixon, H. M., 6.
 Doane, C. F., 11.
 Dodge, J. H., 40.
 Donaldson, N. C., 19.
 Doolittle, R. E., 26.
 Dorman, J. E., 11.
 Dorset, M., 10.
 Dorsett, P. H., 22.
 Doty, S. W., 46.
 Dovenor, W. N., 30.
 Dowling, Oscar, 27.
 Downing, F. P., 48, 52.
 Doyle, A. M., 23.
 Doyle, C. B., 19.
 Doyle, Emma S., 20.
 Drake, J. A., 6.
 Draper, A. E., 23.
 Drummond, Bruce, 19.
 Du Bois, Coert, 17.
 Duckett, A. B., 30.
 Dudley, J. E., jr., 29.
 Duffield, Harry, jr., 22.
 Duke, John W., 27.
 Dunbar, P. D., 23.
 Dunlap, M. E., 16.
 Dunn, Albert C., 40.
 Dunn, J. E., 28.
 Dunning, Carroll W., 46.
 Durham, S. B., 11.
 Duval, Laurel, 50.
 Duvel, J. W. T., 48, 49.
 Dworak, Mayme, 20.
 Dyer, C. A., 23.
 Dyer, C. L., 22.
 Dyer, D. C., 11.
 Eagerton, H. C., 53.
 Earle, D. E., 42, 47, 49.
 Earnshaw, F. L., 33.
 Earp, H. E., 48.
 Eason, F. C., 42.
 Eastham, R. F., 40.
 Ebner, U. S., 32.
 Eckmann, E. C., 28.
 Edler, G. C., 51.
 Edminster, A. F., 46, 51.
 Edmonston, W. D., 30.
 Edson, H. A., 18.
 Edwards, C. W., 37.
 Edwards, John H., 50.
 Edwards, L. S., 11.
 Edwards, R. W., 21.
 Egalite, Leo A., 46.
 Eggleston, W. W., 19.
 Elder, G. C., 45.
 Eldredge, B. R., 11.
 Eldridge, J. H., 40.
 Eldridge, M. O., 40.
 Elliot, Howard M., 48.
 Ellenberger, W. P., 12.
 Ellington, E. V., 11.
 Elliot, E. E., 50.
 Ellis, Don Carlos, 13.
 Ellis, W. O., 29, 46.
 Elmendorf, Armin, 16.
 Elmer, R., 25.
 Else, J. N., 50.
 Elsworth, R. H., 38, 48.
 Emerson, W. B., 39.
 Emery, J. A., 10.
 Emery, James A., 53.
 Emery, W. O., 23.
 Emery, W. T., 29.
 Engels, George E., 46.
 Enlows, Ella M., 17.
 Erbaugh, P. W., 31.
 Eskew, H. L., 27.
 Estabrook, Leon M., 35.
 Evans, A. R., 44, 48.
 Evans, Alice C., 11.
 Evans, Anne M., 47.
 Evans, Edward A., 10.
 Evans, J. A., 38.
 Evans, James O., 20.
 Evans, M. W., 21.
 Evans, Raymond, 6.
 Evans, W. W., 53.
 Evans, Walter H., 36.
 Evenson, O. L., 24.
 Ewing, C. O., 25.
 Ewing, Paul A., 41.
 Ewing, R. M., 51.
 Exline, J. C., 11.
 Fabis, A. I., 29.
 Fagan, M. E., 14.
 Fairbank, H. S., 41.
 Fairchild, David, 22.
 Falck, J. G., 17.
 Farley, F. W., 10.
 Farnham, F. R., 11.
 Farnham, P. S., 33.
 Farrell, F. D., 22.
 Farrell, G. E., 38.
 Farrell, W. C., 51.
 Farrington, A. M., 12.
 Fassig, Oliver L., 9.
 Fauntleroy, J. D., 40.
 Fawcett, V. P., 51.
 Feagans, R. F., 6.
 Fenn, F. A., 17.
 Fenn, Homer E., 17.
 Ferguson, Sterling P., 8.
 Fernald, Justin F., 22.
 Ferris, C. R., 51.
 Ferris, L. W., 24.
 Field, G. W., 33.
 Field, John U., 48.
 Filley, H. C., 48.
 Finch, B. J., 40.
 Findlay, Hugh, 36.
 Fink, D. E., 30.
 Finks, A. F., 26.
 Fischer, Arthur, 11.
 Fischer, George L., 45, 51.
 Fisher, A. K., 32.
 Fisher, Durwood F., 18.
 Fisher, J. W., jr., 43.
 Fisher, John W., jr., 46.
 Fisher, O. S., 38.
 Fisher, W. S., 30.
 Fisk, W. M., 46.
 Fiske, George B., 46.
 Fiske, R. J., 29, 53.
 Fitch, S. E., 40.
 Fitz, L. A., 27.
 Fitz-Randolph, R. B., 27.
 Flanagan, David J., 46.
 Fleming, James, 11.
 Fletcher, C. C., 28.
 Fletcher, W. F., 22.
 Flint, E. R., 36.
 Flint, R. F., 11.
 Flohr, Lewis B., 44, 52.
 Flora, Snowden D., 9.
 Florell, V. H., 19.
 Flory, C. H., 17.
 Ford, A. L., 29.
 Formad, Robert J., 12.
 Forst, L. B., 26.
 Fort, H. M., 29.

- Fortier, Samuel, 41.
 Foster, F. W., 31.
 Foster, L. G., 48.
 Foster, Sam B., 12.
 Foster, W. D., 13.
 Foster, W. H., 31.
 Foubert, Charles L., 20.
 Foust, James, 27.
 Fowler, E. D., 28.
 Fowler, F. H., 17.
 Fowler, Walter, 50.
 Fox, Henry, 28.
 Francis, Alfred W., 19.
 Francis, R. L., 47, 49.
 Frank, William L., 48.
 Frankenfield, Harry C., 9.
 Franklin, I. C., 44.
 Franks, C. G., 50.
 Frantz, A. E., 26.
 Frary, Guy G., 27.
 Freeman, A. M., 54.
 French, W. M., 5.
 Freret, R. A., 49.
 Frevert, G. E., 11.
 Frey, R. W., 24.
 Fries, J. A., 11.
 Fritz, Charles M., 48.
 Froehlich, Paul, 43.
 Frost, S. W., 30.
 Frothingham, E. H., 15.
 Fry, W. H., 27.
 Fuchs, W. R., 34.
 Fuller, H. B., 38.
 Fuller, Paul E., 41.
 Fulton, Harry R., 18.
 Fulton, R. M., 29.
 Funk, W. C., 6.
 Furber, W. B., 26.
 Gable, C. H., 29.
 Gabrielson, I. N., 32.
 Gage, Charles E., 35.
 Gage, R. C., 45, 51.
 Gahan, A. B., 29.
 Gall, A. D., jr., 46.
 Gallagher, B. A., 12.
 Gallaher, Lee, 50.
 Galloway, Beverly T., 22.
 Gamble, J. A., 11.
 Garby, C. D., 25.
 Gardiner, R. F., 27.
 Garlough, F. E., 32.
 Garlough, L. N., 13.
 Garner, W. W., 20.
 Garret, J. B., 19.
 Garrison, Gwynn L., 28.
 Garrison, H. S., 20.
 Garver, Samuel, 21.
 Gasser, G. W., 37.
 Gassman, E. R., 44.
 Gates, O. H., 6.
 Gault, F. M., 27.
 Gault, T. C., 27.
 Gay, M. C., 48.
 Gear, H. H., 50.
 Geib, H. V., 28.
 Geib, W. J., 28.
 Gellert, H. N., 30.
 Georgeson, C. C., 37.
 Gerry, Eloise, 16.
 Getty, Robert E., 21.
 Geyer, E. W., 53.
 Gibbons, C. E., 46.
 Gibbs, H. D., 23.
 Giblin, J. V., 46.
 Gibson, E. H., 31.
 Gibson, L. E., 31.
 Gibson, O. E., 11.
 Gibson, Vane G., 51.
 Gilbert, A. H., 53.
 Gilbert, Etta O., 20.
 Gilbert, G. B., 19.
 Gilbert, J. C., 46.
 Gilbert, W. W., 18.
 Gilbertson, H. W., 38.
 Gilchrist, D. A., 32.
 Gile, P. L., 37.
 Gillespie, Louis J., 19.
 Gill, J. B., 29.
 Gillilan, J. C., 46.
 Gilmore, J. U., 28.
 Giltner, L. T., 12.
 Glaser, R. W., 31.
 Glasson, E. J., 36.
 Glenn, Charles C., 10.
 Glover, M. W., 23.
 Gochenour, W. S., 12.
 Goddard, L. A., 38.
 Godfrey, G. H., 18.
 Goff, R. A., 37.
 Goldbeck, A. T., 41.
 Goldenweiser, E. A., 6.
 Goldman, E. A., 33.
 Goldman, L. J., 32.
 Goll, F. L., 19.
 Gooch, H. R., 31.
 Goodenow, W. G., 48.
 Goodman, A. A., 12.
 Goodman, A. L., 28.
 Goodman, A. M., 11.
 Goodrich, C. E., 25.
 Goodrich, C. L., 6, 38.
 Gordon, Daisy, 41.
 Gore, C. M., 11.
 Gore, H. C., 24.
 Goss, W. L., 20.
 Goucher, Edward, 22.
 Gould, C. W., 16.
 Gould, H. P., 22.
 Gouldman, Henry Y., 22.
 Grab, E. B., 24.
 Grace, O. J., 21.
 Graf, J. E., 30.
 Graff, Herbert, 46.
 Grafke, Harry, 12.
 Graham, A. P., 38.
 Graham, F. W., 31.
 Graham, J. J. T., 25.
 Graham, W. A., 27.
 Granger, C. M., 17.
 Grant, D. H., 23.
 Grant, Robert Q., 9.
 Gravatt, George F., 18.
 Graves, F. W., jr., 31.
 Graves, Henry S., 13.
 Graves, R. R., 11.
 Gray, B. E., 40.
 Greathouse, Charles H., 34.
 Greathouse, L. H., 28.
 Greeley, W. B., 14.
 Green, C. T., 30.
 Greene, Mark H., 48.
 Greenlee, A. D., 26.
 Gregg, Willis R., 9.
 Gregory, W. B., 42.
 Grell, W. H., 45, 50.
 Griffin, E. L., 25.
 Griffin, Gertrude, 16.
 Griffin, M. Y., 44.
 Griffith, L. C., 30.
 Griffiths, David, 22.
 Griggs, W. D., 21.
 Grimes, A. M., 46, 51.
 Griswold, Clyde F., 21.
 Groshon, Maurice, 27.
 Grosvenor, I. R., 40.
 Grotlisch, V. E., 24.
 Grover, O. L., 40.
 Grunsky, H. W., 41.
 Guild, I. T., 31.
 Gurley, J. G., 19.
 Gustafson, E. B., 46.
 Hackleman, W. C., 52.
 Haddon, T. C., 11.
 Hahn, Glenn G., 18.
 Haire, D. G., 40.
 Halbedl, C. C., 53.
 Hall, A. G., 42.
 Hall, E. C., 28.
 Hall, Louis D., 44, 46.
 Hall, W. L., 16, 17.
 Hall, W. N., 42.
 Hall, William H., 46.
 Hallauer, Frank J., 16.
 Haller, R. B., 53.
 Hallstead, A. L., 21.
 Hamilton, C. C., 29.
 Hammerley, J. M., 20.
 Hammond, J. H., 11.
 Hammond, W. F., 10.
 Hamrick, Andrew M., 9.
 Hand, W. F., 27.
 Hansen, A. W., 26.
 Hansen, Albert, 21.
 Hansen, Daniel, 21.
 Hanson, C. H., 36.
 Hanson, E. T., 51.
 Hanson, W. K., 53.
 Hanson, W. S., 33.
 Harden, F. G., 41.
 Hardin, N. A., 44.
 Harding, S. T., 41.
 Harding, T. S., 23.
 Hare, James W., 45.
 Harger, Rolla N., 19.
 Harger, W. C., 40.
 Harker, L. E., 26.
 Harlan, H. V., 19.
 Harned, R. W., 18.
 Harper, Francis, 33.

- Harrington, George T., 20.
 Harris, Agnes W., 38.
 Harris, G. G., 53.
 Harris, G. W., 20.
 Harris, H. A., 46.
 Harris, J. T., 15.
 Harrison, Chas. F., 40.
 Harrison, J. L., 40.
 Harrison, M. L., 20.
 Harrison, R. H., 40.
 Hart, B. R., 26.
 Hart, Guy A., 42.
 Hart, H. J., 29.
 Hart, R. A., 41.
 Harter, L. L., 18.
 Hartley, C. P., 20.
 Hartley, Carl P., 18.
 Hartman, R. H., 20.
 Hartwell, Eugene F., 10.
 Harvey, E. M., 18.
 Harvey, F. L., 15.
 Harvey, Rodney B., 19.
 Haskell, Chester G., 41.
 Haskell, Earl S., 6.
 Haskell, Royal J., 18.
 Hassall, Albert, 13.
 Hasse, Clara H., 18.
 Hasselbring, Heinrich, 19.
 Hastings, S. H., 19.
 Haswell, J. R., 42.
 Hathaway, E. O., 40.
 Hattton, John H., 17.
 Hawbaker, C. C., 44, 52.
 Hawes, A. F., 15, 38.
 Hawker, H. W., 28.
 Hawkins, Kenneth, 31, 38.
 Hawkins, Lon A., 19, 22.
 Hawks, Emma B., 35.
 Hawley, L. F., 16.
 Hawthorne, H. W., 6.
 Hayes, Frank A., 28.
 Haymaker, H. H., 18.
 Haynes, C. D., 41.
 Hays, B. G., 46.
 Haywood, J. K., 25, 53.
 Hazen, William, 27.
 Headley, F. B., 21.
 Headley, Roy, 17.
 Heald, F. E., 36.
 Heald, R. H., 20.
 Heard, Clyde H., 46.
 Hearn, W. E., 28.
 Heath, W. H., 23.
 Hebard, B. M., 44.
 Hedgcock, George G., 18.
 Hedges, Florence, 17.
 Hegel, Henry V., 16.
 Hegwein, Charles F., 50.
 Heidel, B. F., 40.
 Heim, A. L., 16.
 Heinrich, Carl, 30.
 Heinsohn, E. C., 26.
 Hellams, R. V., 47.
 Helmick, Dan S., 42.
 Helpenstine, R. K., Jr., 15.
 Hemphill, Robert G., 41.
 Henchel, N. O., 21.
 Henderson, W. C., 31.
 Hendley, H. W., 40.
 Hennessy, F. W., 33.
 Henricksen, H. C., 37.
 Henry, Alfred J., 7, 9.
 Henry, H. P., 46.
 Henry, Helen H., 20.
 Henry, M. L., 46.
 Henshaw, H. W., 32.
 Hensley, H. S., 53.
 Hepburn, J. S., 26.
 Herbert, F. B., 30.
 Herger, A. W., 50.
 Hess, A. L., 51.
 Hess, O. B., 13.
 Hetzel, Harry C., 43.
 Heyd, D. K., 50.
 Heyd, L. K., 45.
 Hickey, Edward J., 50.
 Hickman, Richard W., 12.
 Hicks, P. R., 16.
 Higginbotham, J. H. H., 42.
 Higgins, E. C., 33.
 Higgins, Edith C., 20.
 Higgins, J. E., 37.
 Higgins, L. A., 11.
 High, M. M., 30.
 Hildebrandt, W. J., 46.
 Hill, C. C., 29.
 Hill, Cary, 17.
 Hill, Charles E., 21.
 Hill, E. A., 50.
 Hill, H. R., 26.
 Hill, I. W., 38.
 Hillman, F. H., 20.
 Hiltner, R. S., 26.
 Hilton, S. G., 50.
 Hilts, R. W., 26.
 Hitchcock, A. S., 21.
 Hite, Bertha C., 20.
 Hoagland, Ralph, 10.
 Hobson, Asher, 48.
 Hodson, E. R., 15.
 Hoerner, G. R., 19.
 Hof Mann, F. W., 48.
 Hoffman, R. H., Jr., 27.
 Hogg, L. J., 29.
 Hoidale, P. A., 53.
 Hoke, C. E., 6.
 Holbert, R. W., 53.
 Holbrook, J. E. R., 31.
 Holden, James A., 21.
 Holland, R. P., 33.
 Holloway, T. E., 28.
 Holman, G. E., 32.
 Holman, H. P., 24.
 Holmes, A. D., 39.
 Holmes, C. L., 6.
 Holmes, George K., 35.
 Holmes, Rachel E., 20.
 Holt, E. G., 32.
 Hood, C. C., 52.
 Hood, C. E., 31.
 Hood, J. D., 32.
 Hooker, W. A., 36.
 Hooper, A. L., 40.
 Hoover, G. W., 26.
 Hoover, J. Harold, 46.
 Hope, C. E., 6.
 Hopkins, A. D., 30.
 Horton, G. D., 26.
 Horton, J. R., 29.
 Hostman, Milton H., 16.
 Houghton, H. W., 23.
 Houghton, Louis N., Jr., 22.
 Houser, H. A., 22.
 Houston, David F., 5.
 Hovey, H. C., 51.
 Howard, B. J., 24.
 Howard, L. O., 28, 31.
 Howard, N. F., 30.
 Howe, Henry C., 10.
 Howe, W. E., 11.
 Howell, A. H., 33.
 Howell, W. H., 11.
 Hoyt, C. F., 11.
 Hubbard, Prevost, 41.
 Hubert, Ernest E., 18.
 Hudgins, Franklin D., 40.
 Hudon, H. E., 25.
 Hudson, A. D., 42, 45, 53.
 Hudson, C. S., 23.
 Hughes, Robert L., 40.
 Hughes, T. L., 50.
 Humphries, W. R., 41.
 Humphrey, C. J., 16, 18.
 Humphrey, H. B., 19.
 Humphreys, William J., 9.
 Hungerford, C. N., 19.
 Hunt, Caroline L., 39.
 Hunt, Geo. M., 16.
 Hunt, Nicholas R., 18.
 Hunter, Byron, 6.
 Hunter, F. H., 52.
 Hunter, W. D., 28, 31, 53.
 Hurst, Lewis A., 19.
 Husmann, F. L., 22.
 Hussman, George C., 22.
 Hutchins, Lee M., 18.
 Hutchinson, R. H., 31.
 Hutchins, Wells A., 41.
 Hutton, C. A., 11.
 Hutton, F. L., 53.
 Hutton, F. Z., 28.
 Hyslop, J. A., 28.
 Imes, Marion, 13.
 Imrie, James E., 16.
 Ingerson, H. J., 29.
 Ingle, M. J., 24.
 Ireland, Harry A., 22.
 Irion, Harry, 14.
 Isbell, Phil C., 46.
 Isely, Dwight, 29.
 Jackson, Albert M., 19.
 Jackson, F. A., 27.
 Jackson, F. H., Jr., 41.
 Jackson, H. H. T., 33.
 Jackson, L. O., 32.
 Jackson, R. C., 11.
 Jackson, R. E., 12.
 Jackson, R. T., 32.
 Jacobs, B. R., 24.

- James, D. L., 45, 50.
 James, E. W., 39.
 Jamieson, A. J., 23.
 Jamison, N. C., 11.
 Jarbine, James T., 14.
 Jarboe, Robert D., 50.
 Jayne, S. O., 6.
 Jeffers, L. M., 48, 50.
 Jeffrey, Wm. F., 40.
 Jeffreys, G. A., 32.
 Jehle, R. A., 18.
 Jellinek, Benjamin, 46.
 Jenkins, Anna E., 18.
 Jenkins, J. Mitchell, 19.
 Jenkins, M. K., 26.
 Jennings, R. D., 6.
 Jensen, M. C., 16.
 Jenson, C. A., 20.
 Jenson, L. N., 21.
 Jesness, O. B., 42.
 Jessup, Louis T., 41.
 Jewell, Edgar S., 53.
 Jewett, S. G., 32.
 Jodidi, S. L., 19.
 Johns, C. O., 25.
 Johns, William L., 47.
 Johnson, A. J., 23.
 Johnson, Elmer, 41.
 Johnson, J. G., 19.
 Johnson, J. M., 6, 25.
 Johnson, J. W., 40.
 Johnson, M. O., 37.
 Johnson, S. K., 27.
 Johnson, Scott, 29.
 Johnson, W. T., jr., 11.
 Johnson, William P., 46.
 Johnston, Don. P., 17.
 Johnston, F. A., 30.
 Johnston, Mrs. C. E., 36.
 Jones, Bernard B., 46.
 Jones, Charles S., 22.
 Jones, D. B., 26.
 Jones, D. W., 31.
 Jones, Fred R., 18.
 Jones, G. B., 28.
 Jones, H. M., 53.
 Jones, J. N., 19.
 Jones, James E., 17.
 Jones, James W., 21.
 Jones, John D., 15.
 Jones, L. A., 42.
 Jones, Oliver F., 22.
 Jones, Paul F., 22.
 Jones, Robert N., 22.
 Jones, Samuel A., 35.
 Jones, T. H., 30.
 Jones, V. R., 11.
 Joslin, J. C., 11.
 Journey, R. C., 28.
 Jucken, Chas. P., 16.
 Juenemann, Henry E., 22.
 Juve, Oscar A., 6.
 Kadel, Benjamin C., 8.
 Kalmbach, E. R., 32.
 Kauffman, C. H., 53.
 Kause, R. L., 47.
 Kearney, T. H., 21.
 Kebler, L. F., 23.
 Keebler, Frederick R., 46.
 Keenan, G. L., 25.
 Keiser, Ed., 50.
 Keister, J. T., 24.
 Kellerman, K. F., 54.
 Kellerman, Karl F., 17, 53.
 Kellog, W. I., 11.
 Kelly, Ernest, 11.
 Kelly, James W., 19.
 Kelser, R. A., 12.
 Kelso, F. L., 21.
 Kemper, J. M., jr., 34.
 Kempton, J. H., 19.
 Kendall, Chas. H., 40.
 Kent, Rodolphus, 46.
 Kephart, L. W., 21.
 Kerbey, McFall, 43, 52.
 Kern, F. W., 46.
 Kerr, John, 17.
 Kerr, John C., 50.
 Kershaw, J. B., 28.
 Kewley, R. J., 29.
 Keyes, Joseph, 32.
 Keyser, C. K., 40.
 Kidder, E. E., 40.
 Kidder, H. H., 41.
 Kiefer, Francis, 17.
 Kiene, F. A., jr., 19.
 Kiernan, J. A., 12.
 Killingsworth, C. E., 47.
 Kimball, Herbert H., 9.
 Kimsey, M. E., 29.
 King, C. J., 20.
 King, W. V., 31.
 King, William M., 50.
 Kinghorne, J. W., 38.
 Kingsbury, Walter, 46.
 Kirk, N. M., 28.
 Kirschner, Charles, 42.
 Kisliuk, Max, jr., 28.
 Kitchen, C. W., 43, 46.
 Klein, J. P., 46.
 Knab, Frederick, 31.
 Knapp, Bradford, 37.
 Knapp, George O., 44.
 Kneipp, L. F., 17.
 Knight, Fred W., 49.
 Knight, H. L., 36.
 Knight, O. D., 25.
 Knobel, E. W., 28.
 Knudsen, Kay B., 42.
 Kocher, A. E., 28.
 Koehler, A., 16.
 Kohlheim, R., 49.
 Kohman, E. F., 26.
 Kolb, C. A., 16.
 Kopman, H. H., 33.
 Korstian, C. F., 17.
 Kostal, Emile, 50.
 Kotinsky, Jacob, 30.
 Kramer, H. S., 52.
 Krause, E. H., 11.
 Krause, R. L., 49.
 Krauss, F. G., 37.
 Kraybill, Henry R., 22.
 Kremers, R. E., 15.
 Kress, Otto, 16.
 Kruegl, C., 41.
 Kuentzel, W. E., 25.
 Kunke, W. F., 23.
 Kunkel, L. O., 18.
 Kupfer, C. A., 16.
 Kuska, Joseph B., 21.
 Kuster, W. E., 51.
 Kyle, Curtis H., 20.
 La Forge, F. B., 23.
 La Master, J. P., 11.
 Laake, E. W., 31.
 Ladd, Edwin F., 27.
 Ladd, George E., 41.
 Ladson, H. H., 12.
 Lake, E. R., 22.
 Lamb, G. M., 15.
 Lamb, W. H., 15.
 Lamon, Harry M., 10.
 Lamson-Scribner, F., 7.
 Landers, D. D., 31.
 Landon, C. R., 32.
 Lane, A. L., 42.
 Lane, M. C., 29.
 Langston, J. M., 29.
 Langworthy, C. F., 36, 39.
 Lantz, D. E., 32.
 Lapham, J. E., 28.
 Lapham, M. H., 28.
 Larrimer, W. H., 29.
 Larsen, H. E., 43.
 Larsen, Harvey E., 52.
 Larson, L. W., 10.
 Lathrop, Elbert C., 19.
 Latimer, W. J., 28.
 Law, John W., 44, 52.
 Lawson, J. F., 6.
 Lawton, E. C., 40.
 Lawyer, G. A., 33.
 Le Clerc, J. A., 25.
 Le Compte, T. R., 28.
 Le Febvre, C. C., 26.
 Lea, E. J., 26.
 Leach, B. R., 29, 53.
 Lee, Harry A., 18.
 Lee, H. W., 28.
 Lee, M. H., 22.
 Leech, Miss Elizabeth B., 15.
 Lees, Fred, 5.
 Lefevre, E., 24.
 Leighty, C. E., 19.
 Leipsner, F. W., 26.
 Leonard, Lewis T., 19.
 Leonard, M. H., 39.
 Lepper, H. A., 24.
 Lepper, Russell L., 46.
 Leroy, James A., 50.
 Letteer, Clarence R., 21.
 Levine, B. S., 24.
 Lewis, H. F., 23.
 Lewis, H. G., 28.
 Lewis, M. R., 41.
 Lewis, R. H., 41.
 Lewis, W. K., 12.

- Liggett, J. A., 38.
 Lightsey, H. C., 52.
 Ligon, J. S., 32.
 Lindgren, Harry A., 22.
 Lindquist, Albert E., 46.
 Linebaugh, S. W., 33.
 Link, George K. K., 18.
 Linney, Charles E., 9.
 Linton, F. B., 23.
 Linzee, E. H., 50.
 Lippincott, Achsah, 43, 52.
 Lippitt, W. F., 27.
 Lister, F. H., 52.
 Livingston, George, 44, 46, 48, 49.
 Livingstone, F. R., 22.
 Lloyd, W. A., 38.
 Locke, L. F., 53.
 Loder, A. E., 40.
 Loftin, U. C., 54.
 Lofton, Robert E., 20.
 Logan, W. F., 47.
 Lohnis, Felix, 19.
 Lombard, P. M., 22.
 Long, C. A., 17.
 Long, William H., 18.
 Longacre, M. Y., 28.
 Longley, Louis E., 21.
 Lord, E. C. E., 41.
 Losh, A. R., 40.
 Lotter, H. H., 40.
 Lounsbury, C., 28.
 Loveland, George A., 9.
 Lowry, Q. S., 30.
 Loyd, H. S., 37.
 Lubs, H. A., 23.
 Luckett, J. D., 36.
 Luginbill, Philipp, 29.
 Lumbard, R. S., 46.
 Lunak, Sidney E., 16.
 Lund, Frants P., 38.
 Lunn, W. M., 20.
 Luster, G. W., 28.
 Lute, Anna M., 20.
 Lyman, George R., 17.
 Lynch, W. D., 25.
 Lynch, W. H., 40.
 Lynde, H. M., 42.
 Lyness, Willard E., 21.
 Lyons, F. R., 40.
 Lyons, M. A., 25.
 Mabbott, D. C., 32.
 Mace, B. M., Jr., 46.
 Mace, W. A., 37.
 Mackey, Walter C., 16.
 MacKellar, Wm. M., 12.
 MacKinnon, Jean, 39.
 MacLaughlin, J. A., 26.
 MacMillan, H. G., 18.
 Magness, J. R., 51.
 Magnuson, H. P., 27.
 Magruder, Don G., 22.
 Mahood, S. A., 16.
 Mains, G. H., 23.
 Makemson, W. K., 25.
 Malkerson, P. J., 44.
 Mangan, W. J., 14.
 Mann, Albert, 20.
 Mann, C. W., 45, 51.
 Mann, L. B., 46.
 Mann, W. M., 30.
 Marbut, Curtis F., 28.
 Maring, Delos T., 8.
 Markell, E. L., 52.
 Markovitz, L. N., 25.
 Markwardt, L. J., 16.
 Marlatt, C. L., 28, 29, 53, 54.
 Marlatt, L. H., 11.
 Marr, James C., 41.
 Marsch, H. O., 30.
 Marsden, Roger D., 42.
 Marsh, C. D., 12.
 Marshall, C. G., 19.
 Marshall, F. R., 10.
 Marshall, Herbert C., 42, 51.
 Marshall, Rush P., 18.
 Marshall, U. S., 40.
 Marshner, Frances Joseph, 6.
 Martin, C. P., 50.
 Martin, Hugh A., 50.
 Martin, J. G., 42.
 Martin, J. H., 19.
 Martin, J. P., 17.
 Martin, L. Herbert, 46.
 Martin, M. G., 23.
 Martin, O. B., 38.
 Martin, W. R., 29.
 Marvin, Charles F., 7.
 Mason, B. B., 44.
 Mason, Lawrence, 53.
 Mason, R. H., 11.
 Mason, S. C., 19.
 Mather, W. B., 24.
 Matheson, K. J., 11.
 Mathews, O. R., 21.
 Mathewson, E. H., 20.
 Mathewson, W. E., 23.
 Matlin, D., 39.
 Matthews, G. C., 31.
 Matthias, J. L., 40.
 Mattoon, W. R., 15, 38.
 Maudlin, Cecil V., 16.
 Mauldin, C. E., 11.
 Maxon, E. T., 28.
 May, D. W., 37.
 May, H. G., 13.
 MayKaye, Benton, 15.
 McAleer, H. A., 26.
 McAtee, W. L., 32.
 McBeath, David L., 40.
 McBryde, C. N., 10.
 McCabe, F. A., 51.
 McCain, A. C., 17.
 McCall, M. A., 19.
 McCalla, W. A., 40.
 McCarthy, T. H., 41.
 McClain, J. H., 11, 38.
 McClelland, B., 23.
 McClelland, T. B., 37.
 McCleskey, Joseph R., 50.
 McClintock, J. A., 18.
 McClure, Frank D., 44, 52.
 McClure, H. B., 6.
 McClure, R. W., 28.
 McConnell, O. J., 42.
 McConnell, W. R., 29.
 McConville, A. H., 6.
 McCormick, E. B., 41.
 McCreight, A. M., 15.
 McGrory, S. H., 41.
 McCulloch, Lucia, 17.
 McDonald, O. J., 46.
 McDonald, William H., 50.
 McDonnell, C. C., 25.
 McFarlane, Robert A., 42.
 McGehee, T. F., 28.
 McGeorge, W. T., 24.
 McGowan, D. F., 6.
 McGowan, E. F., 46.
 McGregor, E. A., 28.
 McIndoo, N. E., 29.
 McIntyre, A. J., 23.
 McIntyre, H. L., 31.
 McKay, A. W., 45.
 McKee, Roland, 21.
 McKellip, Ivan, 11.
 McKelvey, S. R., 26.
 McKenny, R. E. B., 17.
 McKenzie, T. P., 17.
 McKeown, R. B., 53.
 McKeown, R. W., 29.
 McKerrrow, W. A., 11.
 McKinney, K. B., 28, 54.
 McKinzie, James F., 50.
 McKune, E. F., 43, 52.
 McLane, J. W., 20.
 McLaughlin, Allen J., 27.
 McLaughlin, W. W., 41.
 McLendon, W. E., 28.
 McMurrin, S. M., 18.
 McMurtrey, J. E., Jr., 20.
 McNabb, Charles A., 48.
 McNair, A. D., 6.
 McNary, J. V., 40.
 McNaughton, G. C., 16.
 McNulty, E. D., 46.
 McNulty, J. B., 11.
 McRae, W. A., 26.
 Mead, J. P., 46.
 Meckstroth, G. A., 18.
 Meehan, T. E., 11.
 Meekins, T. S., 33.
 Mehl, J. M., 42.
 Meier, F. C., 18.
 Meigs, E. B., 11.
 Meineche, E. P., 18.
 Melbourn, F. R., 50.
 Meloy, Guy S., 19.
 Menaugh, C. S., 31.
 Menderson, N., 43, 52.
 Mercer, J. E., 33.
 Mercier, W. B., 38.
 Mercker, Albert E., 46.
 Merriam, C. Hart, 32.
 Merrill, B. G., 33.
 Merrill, C. E., 52.
 Merrill, Jason L., 20.
 Merrill, T. C., 23.
 Merritt, Eugene, 36.
 Merry, H. S., 11.

- Merz, A. R., 28.
 Meserve, Charles A., 26.
 Messick, F. A., 53.
 Metcalf, F. P., 32.
 Metcalf, Haven, 18.
 Metzger, H. W., 44.
 Meyer, A. H., 28.
 Meyer, Frank N., 22.
 Meyer, George M., 46.
 Meyer, Herman F., 45, 50.
 Meyer, W. E., 11.
 Meyers, P. R., 29.
 Mickie, J. D., 27.
 Middleton, H. E., 28.
 Middleton, William, 30.
 Miles, George F., 21.
 Miles, H. J., 31.
 Miles, Hamilton V., 40.
 Miles, P. B., 29.
 Miles, R. T., 50.
 Mill, Robert C., 50.
 Millender, H. C., 53.
 Miller, A. W., 11.
 Miller, C. F., 27.
 Miller, Dalton G., 42.
 Miller, E. A., 38.
 Miller, Fred E., 22.
 Miller, G. H., 6, 40.
 Miller, H. A., 6.
 Miller, J. M., 30.
 Miller, M. I., 53.
 Miller, R. C., 50.
 Miller, T. A. H., 41.
 Milliken, F. B., 30.
 Milton, R. H., 20.
 Minott, C. W., 31.
 Mitchell, A. S., 23.
 Mitchell, Alexander J., 9.
 Mitchell, G. A., 42.
 Mitchell, J. D., 28.
 Mitchell, William A., 9.
 Mitchelson, Albert T., 41.
 Mitman, C. W., 41.
 Mohler, John R., 10.
 Monroe, K. P., 23.
 Montell, E. W., 51.
 Montgomery, Frank, 6.
 Moomaw, B. C., jr., 48.
 Moomaw, C. W., 45.
 Moomaw, Leroy, 21.
 Mooney, C. N., 28.
 Moore, M. D., 36.
 Moorefield, Chas. H., 40.
 Moorhouse, L. A., 6.
 More, C. T., 43, 48, 51, 52.
 Morehouse, A. D., 41.
 Moreland, R. W., 28.
 Morgan, A. C., 28.
 Morgan, G. W., 21.
 Morgan, H. P., 46.
 Morgan, J. D., 48.
 Morgan, W. J., 25.
 Morrell, Fred. W., 17.
 Morris, Charles C., 40.
 Morris, E. L., 50.
 Morris, Leslie R., 16.
 Morrison, A. B., 31.
 Morrison, C. G., 40.
 Morrison, H. L., 29.
 Morrison, Harold, 30.
 Morrison, J. D., 19.
 Morrison, Lisle, 6.
 Morrison, T. M., 28.
 Morrow, James E., 22.
 Morse, George Byron, 12.
 Morse, J. J., 43, 52.
 Morse, W. J., 21.
 Mortlock, H. C., 28.
 Moseley, T. W., 11.
 Mosher, F. H., 31.
 Mosher, J. M., 52.
 Mosier, Willard H., 46.
 Moss, E. G., 20.
 Moss, Melvin, 11.
 Mowry, H. H., 6.
 Moznette, G. F., 30.
 Mudd, A. I., 34.
 Mudge, C. S., 11.
 Mueller, M. I., 16.
 Muesebeck, C. F. W., 31.
 Mulford, F. L., 22.
 Mulholland, L. G., 48.
 Munch, J. C., 23.
 Muncie, J. H., 18.
 Mundell, J. E., 21.
 Munger, H. E., 46.
 Munn, C. E., 50.
 Munro, W. N., 15.
 Munro, Willis, 31.
 Munroe, Joseph U., 8.
 Murph, D. S., 48, 50.
 Murphy, D. G., 31.
 Murphy, L. S., 14.
 Murray, F. E., 11, 12.
 Murray, Nat C., 35.
 Murschell, Otto, 27.
 Musgrave, G. W., 28.
 Musgrave, M. E., 32.
 Musser, H. B., 48.
 Musser, K. B., 11.
 Nahstoll, G. A., 44.
 Nason, Wayne C., 47.
 Nealon, E. J., 25.
 Negley, N. A., 11.
 Nellis, J. C., 15.
 Nelson, A. E., 46.
 Nelson, E. K., 23.
 Nelson, E. W., 31, 32.
 Nelson, J. A., 28.
 Nelson, J. W., 14.
 Nelson, P., 37.
 Nesom, G. E., 11.
 Nevius, W. J., 33.
 Newcomer, E. J., 29.
 Newell, Wilmon, 18.
 Newlander, C. E., 11.
 Newlin, John A., 16.
 Newman, H. E., 51.
 Newman, J. B., 27.
 Newton, R. L., 45, 50.
 Niccols, E. E., 46.
 Nigh, V. L., 50.
 Nighbert, E. M., 12.
 Niles, W. B., 10.
 Nixon, R. L., 45, 50.
 Noble, Edward G., 21.
 Noland, D. R., 11.
 Noll, E. C., 50.
 Norcross, T. W., 16.
 Norgord, C. P., 27.
 Norquest, Clinton E., 9.
 Norris, Chas. B., 16.
 Norton, J. B., 18.
 Nougaret, R. L., 29.
 Noyes, G. Harold, 9.
 Nuckols, Samuel B., 21.
 Nunn, Roscoe, 10.
 Oakleaf, H. B., 17.
 Oakley, R. A., 21, 22.
 Oates, M. B., 6.
 Oberhelman, G. O., 25.
 Oberholser, H. C., 33.
 Odell, F. L., 11.
 Ogaard, A. J., 21.
 Ogden, Miss E. L., 36.
 Ohlendorf, Walter, 53.
 O'Leary, E. B., 28.
 Oliver, G. L., 11.
 Olmstead, L. B., 28.
 O'Loughlin, W. J., 49.
 Olson, Otto, 20.
 O'Neal, A. M., jr., 28.
 Orpet, E. O., 22.
 Orr, William M., 46.
 Orton, W. A., 18, 53.
 Osborn, W. M., 21.
 Osenbrug, Albert, 21.
 Osterhout, K. J., 25.
 Oswald, W. R., 45, 51.
 O'Toole, M. J., 34.
 Ousley, Clarence, 5, 34.
 Pacetti, B. J., 33.
 Packard, C. M., 29.
 Page, J. H., 26.
 Page, Logan Waller, 39.
 Page, W. B., 28.
 Paine, H. S., 24.
 Painé, J. H., 29.
 Palen, A. E., 40.
 Palkin, S., 23.
 Palmer, Edgar A., 19.
 Palmer, H. E., 24.
 Palmer, Lester E., 53.
 Palmer, T. S., 31.
 Palmore, J. I., 24.
 Park, J. William, 46.
 Parker, Asa B., 50.
 Parker, J. B., 11.
 Parks, G. H., 11.
 Parks, H. B., 29.
 Parks, K. E., 11.
 Parman, D. C., 31.
 Parry, Harland S., 40.
 Parry, H. S., 40.
 Parshall, Ralph L., 41.
 Parsons, F. E., 43.
 Parsons, P. B., 24.
 Patrick, A. L., 28.

- Patten, A. J., 27.
 Patten, H. E., 23.
 Patterson, Flora W., 18.
 Pattison, Ethel M., 20.
 Patton, F. M., 44.
 Pauls, Jarl T., 40.
 Paxton, I. B., 11.
 Payne, G. W., 52.
 Pearce, Julia R., 20.
 Pearl, Raymond, 54.
 Pearson, R. A., 5.
 Peck, Allen S., 14.
 Peck, F. W., 6.
 Peirce, V. M., 40.
 Pemberton, C. E., 30.
 Pennington, M. E., 26.
 Pennington, W. E., 29.
 Pennybacker, J. E., 39, 40.
 Perdon, J. M., jr., 6.
 Peryam, T. W., 32.
 Peter, Phillip Norman, 21.
 Peters, B. L., 22.
 Peters, J. G., 14.
 Peters, J. H., 46.
 Peterson, C. E., 21.
 Peterson, Peter, 46.
 Peterson, R. M., 46.
 Peterson, T. C., 40.
 Peterson, W. A., 21.
 Pew, Irving W., 12.
 Pfaender, M., 21.
 Phelps, I. K., 23.
 Phillips, E. F., 31.
 Phillips, F. D., 41.
 Phillips, James V., 42.
 Phillips, O. F., 50.
 Phillips, S. W., 23.
 Phillips, W. J., 29.
 Pickens, James M., 13.
 Pickett, R. C., 30.
 Pierce, H. C., 26.
 Pierce, Leslie, 18.
 Pierce, Roy P., 18.
 Pierce, W. D., 28.
 Pierson, A. H., 15.
 Pieters, A. J., 21.
 Pike, A. B., 11.
 Pino, A. L., 52.
 Piper, Charles V., 20.
 Piper, S. E., 32.
 Pirtle, T. R., 11.
 Pistor, A. J., 11.
 Pittier, H., 19.
 Plank, H. K., 29.
 Plummer, A. B., 31.
 Pollock, J. H., 30.
 Pomeroy, C. S., 22.
 Pooler, Frank C. W., 17.
 Pooley, F. C. W., 17.
 Poore, H. D., 26.
 Poos, F. W., 29.
 Pope, George W., 12.
 Pope, W. B., 27.
 Popenoe, C. H., 30.
 Popenoe, Wilson, 22.
 Porter, B. A., 29.
 Porter, George W., 52.
 Posey, Gilbert G., 18.
 Posson, R. J., 11.
 Postle, S. A., 23.
 Potter, A. A., 19.
 Potter, Albert F., 13.
 Potts, C. S., 51.
 Potts, Roy C., 45, 50.
 Pou, R. L., 11.
 Powell, O. N., 40.
 Powell, Ola, 38.
 Power, F. B., 25.
 Pratt, B. B., 52.
 Pratt, H. E., 37.
 Pratt, O. A., 53.
 Pratt, R. E., 17.
 Preble, E. A., 32, 33.
 Preston, A. H., 53.
 Preston, H. A., 31.
 Preston, J. F., 17.
 Price, D. J., 24.
 Price, T. M., 11.
 Price, W. J., 29.
 Pritchard, F. J., 18.
 Pritchett, Louise B., 36, 39.
 Propps, D. H., 11.
 Puckett, F. S., 53.
 Purcell, Benj. L., 27.
 Purssell, Ulysses G., 9.
 Quaintance, A. L., 29, 53.
 Quesenberry, J. R., 11.
 Quick, W. C., 46, 51.
 Quiggle, E. B., 6.
 Quinerly, J. P., 11.
 Rabak, Frank, 19.
 Rabild, Helmer, 38.
 Rachford, C. E., 17.
 Rader, F. E., 37.
 Radway, C. W., 11.
 Ramser, Charles W., 42.
 Ramsey, G. B., 18.
 Ramsey, H. J., 45, 51.
 Ramsay, R. A., 12.
 Rand, Frederick V., 17.
 Rankin, E. J., 22.
 Rankin, John M., 22.
 Ransick, Edward J., 46.
 Ransom, W. H., 33.
 Ranson, B. H., 13.
 Rask, O. S., 24.
 Ratcliffe, George T., 21.
 Rawl, B. H., 10, 11.
 Ray, S. H., 46.
 Raynor, Clarence E., 40.
 Read, E. A., 25.
 Read, F. W., 46.
 Reavis, D. D., jr., 24.
 Redfield, H. W., 24.
 Reddy, Chas. S., 19.
 Redman, R. W., 38.
 Reed, A. J., 11.
 Reed, C. A., 22.
 Reed, E. O., 24.
 Reed, F. W., 17.
 Reed, Hiram R., 21.
 Reed, J. B., 25.
 Reeder, George, 9.
 Reese, Madge J., 38.
 Reese, Robert M., 5.
 Reeve, C. S., 41.
 Reeves, G. I., 29.
 Regan, S. A., 48.
 Reid, E. B., 34.
 Reid, Fred R., 19.
 Reid, H. M., 32.
 Reid, Lawrence J., 22.
 Reidy, J. B., 12.
 Reynolds, B. A., 31.
 Reynolds, F. H., 12.
 Reynolds, Lynus C., 46.
 Reynolds, R. V. R., 15.
 Rhoads, Arthur S., 18.
 Rhoades, Harry A., 50.
 Rhodes, Wm. H., jr., 40.
 Ribald, Molmer, 11.
 Rice, A. G., 27.
 Rice, J. H., jr., 33.
 Rice, T. D., 28.
 Richards, B. B., 32.
 Richards, C. Audrey, 16.
 Richardson, H. B., 47.
 Richardson, J. Z., 20.
 Richey, Fred D., 20.
 Ricker, D. A., 29.
 Ricker, P. L., 21.
 Rickles, A., 50.
 Rideout, Percy A., 40.
 Ridgway, Charles S., 20.
 Ridley, V. W., 46, 51.
 Rles, Louis N., 51.
 Riley, Smith, 17.
 Rinehart, E. F., 22.
 Ringer, Robert L., 46.
 Ringland, Arthur C., 13.
 Ritter, S. C., 33.
 Rittue, E. C., 21.
 Rixford, G. P., 19.
 Roach, P. J., 46.
 Roark, R. C., 25.
 Robb, F. G., 43, 52.
 Roberts, George M., 26.
 Roberts, J. A., 27.
 Roberts, J. W., 18.
 Roberts, Orris W., 9.
 Roberts, R. W., 7.
 Robinson, J. M., 29.
 Robotka, Frank, 44, 48.
 Rockie, W. A., 28.
 Rockwell, J. E., 17.
 Rockwell, William L., 41.
 Rockwood, L. P., 29.
 Rodgers, H. M., 51.
 Rogers, D. M., 31.
 Rogers, John T., 53.
 Rogers, L. A., 11.
 Rogers, R. F., 28.
 Rohwer, Carl, 41.
 Rohwer, S. A., 30.
 Rolf, A. F., 11.
 Rolfe, A. W., 46.

- Rommel, George M., 10.
 Root, Clarence J., 9.
 Roper, F. A., 38.
 Rosa, R. R., 53.
 Rosenbaum, Joseph, 18.
 Rosengarten, W. E., 40.
 Ross, John F., 19.
 Ross, S. H., 23.
 Ross, W. H., 28.
 Rothgeb, B. E., 19.
 Rothrock, Philip, 50.
 Round, L. A., 24.
 Royder, D. E., 53.
 Royder, J. P., 53.
 Rudolph, Bert A., 18.
 Ruggles, Edw. F., 40.
 Ruggles, F. S., 42.
 Rumbold, Caroline, 21.
 Rundles, John C., 6.
 Runkell, H., 23.
 Runner, G. A., 29.
 Running, D. G., 31.
 Runyan, Clifford R., 46.
 Rupp, P., 11.
 Rush, A. L., 48.
 Russel, P. G., 22.
 Russell, C. A., 49.
 Russell, C. B., 31.
 Russell, G. Archie, 19.
 Russell, R. J., 52.
 Ruth, C. C., 48.
 Rutledge, R. H., 17.
 Rutlege, Ralph M., 46.
 Ruzicka, Charles H., 21.
 Ryan, H. J., 30.
 Safford, W. E., 21.
 Sahr, C. A., 37.
 Salant, W., 25.
 Sale, J. W., 26.
 Salisbury, George N., 10.
 Samman, George P., 52.
 Sams, C. L., 31.
 Sanders, J. W., 18.
 Sando, Charles E., 22.
 Sanford, H. L., 29, 53.
 Sans, E. R., 32.
 Sarle, C. F., 6.
 Sarvis, J. T., 21.
 Sasscer, E. R., 29, 53.
 Satterthwait, A. F., 29.
 Saunders, D. A., 19.
 Saunders, R. D., 50.
 Savage, E. M., 19.
 Saveley, H. E., 38.
 Sayre, R. E., 24.
 Scales, F. M., 19.
 Scales, Geo. C., 40.
 Scammel, H. B., 29.
 Schaffner, J. V., Jr., 31.
 Scheffer, T. H., 32.
 Schleussner, O. W., 43, 46.
 Schlick, William J., 42.
 Schmidt, E. W., 11.
 Schneider, Charles F., 9.
 Schneider, F. L., 11.
 Schneiderhan, F. J., 19.
 Schoening, H. W., 12.
 Schnoer, E. H., 47.
 Schoth, H. A., 21.
 Schriener, Oswald, 19.
 Schroeder, J. P., 28.
 Schulte, J. I., 36.
 Schultz, E. S., 18.
 Schultz, L. G., 52.
 Schuster, C. E., 46, 51.
 Schuyler, J. T., 40.
 Schwartz, Benjamin, 13.
 Schwartz, E. W., 25.
 Schwarz, E. A., 31.
 Scoby, Frederick C., 41.
 Scofield, C. S., 21.
 Scott, E. W., 29.
 Scott, G. R., 46.
 Scott, Leo B., 22.
 Scott, V. E., 11.
 Scott, W. M., 43, 48, 51, 52.
 Scoville, R. I., 11.
 Seamans, Arthur E., 21.
 Seamans, H. L., 29.
 Searles, H. C., 11.
 Sechrist, E. L., 31.
 See, Geo. C., 40.
 Seeds, K. B., 44, 50.
 Seeker, A. F., 26.
 Seifert, Edw. M., 40.
 Selgler, Eugene A., 18.
 Selkregg, E. R., 29.
 Selleck, W. F., 52.
 Seyboth, Robert, 8.
 Shafer, Fred F., 42.
 Shamel, A. D., 22.
 Shanahan, William F., 50.
 Shanley, E. J., 26.
 Shannon, B. I., 14.
 Shantz, H. L., 21.
 Shapovalov, Mitchell, 18.
 Shaver, B. J., 33.
 Shaw, G. H., 11.
 Shaw, H. B., 53.
 Shaw, R. H., 11.
 Shear, C. L., 18.
 Shear, S. W., 43, 52.
 Sheedy, John, 50.
 Shepherd, J. B., 11.
 Shepherd, M. B., 31.
 Sherman, Caroline B., 42.
 Sherman, E. A., 14.
 Sherman, J. M., 11.
 Sherman, Thomas G., 7.
 Sherman, W. A., 51.
 Sherman, Wells A., 42, 46.
 Sherwood, S. F., 23.
 Shippen, L. P., 25.
 Shockley, L. C., 11.
 Shoemaker, D. N., 22.
 Shoemaker, Ralph H., 46.
 Shoenmann, L. R., 28.
 Sherrill, William U., 53.
 Sherwood, A. H., 29.
 Shibley, J. G., 53.
 Shollenberger, J. H., 48.
 Shore, H. J., 13.
 Shorey, E. C., 27.
 Shreve, S. F., 52.
 Shroeder, E. C., 13.
 Shull, J. M., 18.
 Shuman, Edwin P., 40.
 Sidler, C. E., 26.
 Siegler, E. H., 29.
 Sieglinger, John B., 19.
 Sievers, A. F., 19.
 Siggers, Paul V., 18.
 Silberberg, B. H., 25.
 Silcox, F. A., 17.
 Silver, James, 32.
 Simanton, F. L., 29.
 Simmonds, Edward, 22.
 Simons, L. R., 38.
 Simons, Perry T., 42.
 Simpson, D. M., 19.
 Simpson, F. M., 46.
 Simpson, J. A., 18.
 Simpson, Otis E., 46.
 Singleton, F. E., 36.
 Sirrine, Emma F., 20.
 Skeels, H. C., 22.
 Skeggs, J. H., 40.
 Skidmore, D. I., 13.
 Skinner, G. R., 11.
 Skinner, J. C., 47.
 Skinner, Joshua J., 19.
 Skinner, R. L., 26.
 Skinner, W. W., 26.
 Slack, Torbert, 28.
 Slade, H. C., 47, 49.
 Slagg, C. M., 20.
 Slater, D. J., 46.
 Slaughter, J. Pemberton, 9.
 Sleight, Reuben B., 41.
 Sloan, William G., 41.
 Smely, A. B., 44.
 Smiles, E. H., 28.
 Smith, A. G., 6.
 Smith, C. B., 38.
 Smith, C. M., 25.
 Smith, C. P. S., 33.
 Smith, C. R., 24.
 Smith, Clinton G., 17.
 Smith, E. B., 28.
 Smith, E. E., 24.
 Smith, E. I., 12.
 Smith, Edwin, 45.
 Smith, Erwin F., 17.
 Smith, Franklin H., 15.
 Smith, Fred G., 49.
 Smith, Guy C., 48.
 Smith, Guy L., 42.
 Smith, G. D., 28.
 Smith, H. C., 28.
 Smith, H. E., 12.
 Smith, H. G., 21.
 Smith, H. P., 53.
 Smith, Harold F., 51.
 Smith, Herbert A., 13.
 Smith, J. D., 29.
 Smith, J. G., 27.
 Smith, J. Warren, 7.

- Smith, John W., 9.
 Smith, Julius, 46.
 Smith, K. A., 23.
 Smith, L. N., 19.
 Smith, Luke E., 40.
 Smith, M. R., 30.
 Smith, N. R., 19.
 Smith, Phillip H., 27.
 Smith, R. B., 50.
 Smith, R. S., 11.
 Smith, R. W., 19.
 Smith, S. D., 53.
 Smith, Sybil L., 36.
 Smith, W. M., 50.
 Smulyan, M. T., 31.
 Smyth, Patrick H., 9.
 Snapp, O. I., 29.
 Snodgrass, M. D., 37.
 Snow, C. L., 42.
 Snyder, Elmer, 22.
 Snyder, J. M., 28.
 Snyder, T. E., 30.
 Snyder, W. P., 37.
 Solem, O. P., 40.
 Somerville, M. L., 25.
 Sommers, T. A., 51.
 Sondergaard, M. P. A., 11.
 Sorensen, J., 27.
 Spaulding, Perley, 18.
 Speare, Alden T., 29.
 Spencer, F. W., 11.
 Spencer, G. C., 28.
 Spencer, L. R., 51.
 Spencer, Oscar L., 50.
 Spethmann, Marie T., 36.
 Spidel, R. H. H., 40.
 Spillman, W. J., 6.
 Spoon, Wm. L., 40.
 Squire, Charles H., 15.
 Stabler, H. O., 17.
 Stadler, L. J., 19.
 Stadlmeir, Albert, 33.
 Stadtmueller, Frank H., 26.
 Staebner, Frederick E., 42.
 Stahl, C. F., 30.
 Stahl, C. J., 17.
 Staley, W. F., 6.
 Stallings, B. D., 34.
 Stanford, E. E., 25.
 Stanford, J. S., 29.
 Stanley, F. W., 42.
 Stanton, T. R., 19.
 Staples, C. H., 11.
 Starcher, G. C., 18.
 Steddom, R. P., 11.
 Stedman, J. M., 36.
 Steece, Henry M., 19.
 Steffani, C. H., 22.
 Steinkoenig, L. A., 27.
 Stengel, A., 26.
 Stephens, D. E., 19.
 Stephens, J. M., 21.
 Stephens, W. V., 52.
 Stephenson, C. H., 25.
 Sterrett, W. D., 15.
 Stevens, Edmund H., 28.
 Stevens, F. D., 6.
 Stevens, H. G., 11.
 Stevens, Niel E., 18.
 Stevens, Wayne M., 46.
 Stewart, John T., 42.
 Stewart, M. M., 43, 52.
 Stewart, William P., 10.
 Stiles, C. F., 29.
 Stiles, M. F., 49.
 Stillman, Chester H., 40.
 Stillwell, Edwin W., 43, 46.
 Stine, Oscar C., 6.
 Stoa, Theodore, 19.
 Stockberger, W. W., 19.
 Stockbridge, Miss H. E., 15.
 Stockton, M., 52.
 Stockton, Manley, 43.
 Stone, C. B., 25.
 Stone, B. Frank, 44.
 Stoneberg, Hugo, 20.
 Stonier, Duane, 32.
 Storvick, O. A., 11.
 Stott, Mary L., 20.
 Strahorn, A. T., 28.
 Strait, Earl D., 6.
 Strait, H. G., 6.
 Strand, Harold M., 44.
 Strang, F. L., 52.
 Straughn, M. N., 23.
 Stuntz, S. C., 22.
 Stuart, D., 11.
 Stuart, George A., 20.
 Stuart, R. Y., 14.
 Stuart, William, 22.
 Stubblefield, B. J., 50.
 Studley, James D., 16.
 Sturtevant, A. P., 31.
 Sudworth, George B., 14, 53.
 Sullivan, A. L., 26.
 Sullivan, John J., 46.
 Sullivan, Richard H., 10.
 Summers, A. C., 27.
 Summers, J. N., 31.
 Summers, Melvin B., 9.
 Summers, Thomas H., 47.
 Surface, H. E., 16.
 Sutton, C. J., 24.
 Swan, G. C., 26.
 Swanson, D. L., 46.
 Swarthout, A. V., 44.
 Sweet, A. T., 28.
 Sweet, S. L., 48.
 Swingle, Maude K., 19.
 Swingle, Walter T., 18.
 Swinkwin, W. A., 31.
 Szymoniak, B., 22.
 Tait, Clarence E., 41.
 Talman, Charles F., 8.
 Tanaka, Tyozauro, 19.
 Taylor, A. E., 23, 28.
 Taylor, A. F., 32.
 Taylor, Fred, 42, 45, 47, 48, 49, 52.
 Taylor, G. B., 11.
 Taylor, G. P., 49.
 Taylor, Minnie W., 18.
 Taylor, S. Le Roy, 40.
 Taylor, W. P., 33.
 Taylor, William A., 17.
 Teele, Ray P., 41.
 Teesdale, C. H., 16.
 Tejada, Eduardo G., 54.
 Tenny, F. A., 51.
 Tharp, W. E., 28.
 Thawley, William R., 46.
 Thelen, Rolf, 15.
 Thom, Charles, 24.
 Thomas, Edward C., 42.
 Thomas, G. L., 11.
 Thomas, H. E., 37.
 Thomas, L. M., 48.
 Thompson, C. W., 47, 51.
 Thompson, H. C., 22.
 Thompson, James, 19.
 Thompson, S. C., 11.
 Thompson, William G., 46.
 Thomson, E. H., 6.
 Thurston, W. B., 11.
 Thysell, J. C., 21.
 Tidestrom, Ivar, 21.
 Tiemann, H. D., 16.
 Tillman, B. W., 28.
 Tillotson, C. R., 15.
 Tisdale, H. B., 18.
 Tisdale, W. H., 19.
 Titus, E. G., 21.
 Tobey, G. N., 11.
 Tobin, J. J., 40.
 Todd, Louis D., 51.
 Tolley, H. R., 6.
 Toms, Raymond E., 40.
 Tolstrup, M. R., 48.
 Tomson, W. E., 11.
 Totman, C. E., 31.
 Tower, D. G., 29, 53.
 Tower, W. V., 37.
 Towle, R. S., 21.
 Towles, Virginius E., 40.
 Townsend, C. H. T., 53.
 Townsend, C. O., 21.
 Townsend, Karl H., 53.
 Tracey, W. W., jr., 21.
 Tracy, J. E. W., 22.
 Tracy, Samuel M., 21.
 Tracy, W. W., sr., 22.
 Treacy, R. H., 12.
 Treuthardt, E. L. P., 24.
 Trimble, C. S., 11.
 Trout, C. E., 20.
 Truax, Hartley E., 43.
 True, A. C., 35.
 True, Rodney H., 19.
 Truesdell, Leon E., 47.
 Trullinger, R. W., 36.
 Tubergen, C. B., 46.
 Tucker, E. S., 28.
 Tucker, H. E., 49.
 Tull, J. H., 48.
 Turley, T. B., 28.
 Turner, C. F., 29.
 Turner, H. A., 6.

- Turner, J. D., 27.
 Turner, W. B., 29.
 Turrentine, J. W., 28.
 Urbahns, T. D., 29.
 Valgreen, V. N., 47.
 Van Dine, D. L., 31.
 Van Eseltine, Glen P., 22.
 Van Fleet, Walter, 22.
 Van Kirk, L. H., 44.
 Van Orman, S. L., 51.
 Van Zwabenburg, R. H., 29.
 Vanatta, E. S., 28.
 Van-Duyne, C., 28.
 Vankirk, L. H., 47.
 Veatch, J. O., 28.
 Veitch, F. P., 24.
 Vener, Benjamin, 11.
 Vickery, R. A., 29.
 Viegmeier, Frank J., 41.
 Viehoever, A., 25.
 Viereck, H. L., 32.
 Vinall, H. N., 21.
 Vincent, W., 26.
 Vinton, H. W., 31.
 Visart, E. V., 33.
 Von Herrman, Charles F., 9.
 Vosbury, Edward D., 22.
 Voshell, J. T., 40.
 Vrooman, Carl, 5.
 Wacaser, W. D., 33.
 Wade, J. A., 26.
 Wade, J. S., 29.
 Wade, Theo., 42.
 Waggaman, W. H., 28.
 Wagner, Cary R., 28.
 Wagner, Fay A., 21.
 Wagner, H. H., 26.
 Wagner, J. H., 31.
 Waha, A. O., 14.
 Waite, M. B., 53.
 Waite, Merton B., 18.
 Waldron, J. A., 11.
 Walker, H. F., 46.
 Walker, John C., 18.
 Walker, W. B., 46.
 Wallace, Fred L., 50.
 Wallen, D. M., 22.
 Walter, E. V., 29.
 Walters, Edward H., 19.
 Walters, H. H., 26.
 Walton, G. P., 25.
 Walton, W. R., 28.
 Walz, Ferdinand J., 9.
 Warber, G. P., 45, 50.
 Warburton, C. W., 19.
 Ward, A. R., 12.
 Ward, Don D., 52.
 Ward, Florence E., 38.
 Ware, John F., 51.
 Warner, A. E., 44.
 Warner, H. H., 46.
 Warren, G. M., 41.
 Warren, Miss Gertrude L., 38.
 Washburn, H. J., 12.
 Washburn, Raymond S., 6.
 Watkins, D. W., 11.
 Watkins, W. I., 28.
 Watson, E. B., 28.
 Watson, Irving A., 27.
 Watson, L. O., 18, 38.
 Watt, J. E., 11.
 Waugh, Wm. H., 40.
 Webb, Alan G., 53.
 Webb, J. E., 53.
 Webb, J. L., 31.
 Webb, Walter R., 16.
 Webber, R. T., 31.
 Weber, F. C., 23.
 Weil, L. I., 46.
 Weimar, A. C., 11.
 Weimer, J. L., 18.
 Welshaar, L. J., 52.
 Welch, R. R., 11.
 Wells, Edward L., 10.
 Wells, Herbert C., 40.
 Wells, Sidney D., 16.
 Wells, Walton G., 21.
 Welsh, George W., 52.
 Wescott, C. W., 11.
 Wessling, Hannah H., 38.
 Westgate, J. M., 37.
 Weston, William H., jr., 19.
 Westover, E. L., 11.
 Westover, Harvey L., 21.
 Wetmore, Alexander, 32.
 Whalin, C. V., 44.
 Whalin, Charles V., 47.
 Wharton, Miss Georgie, 15.
 Wharton, W. R. M., 26.
 Wheeler, B. L., 15.
 Wheeler, Ernest S., 40.
 Wheeler, G. C., 51.
 Wheeler, W. A., 44, 51.
 Whelpton, P. K., 38.
 Wherry, E. T., 23.
 Whitcomb, W. D., 29, 53.
 White, Alma R., 21.
 White, D. G., 16.
 White, G. C., 43.
 White, G. F., 28.
 White, John K., 27.
 White, T. P., 13.
 White, W. T., 37.
 White, William, 11.
 Whiting, H. H., 11.
 Whitlock, Bert W., 50.
 Whitney, Milton, 27.
 Whitney, Paul B., 40.
 Whitsit, Lyle A., 16.
 Whittaker, J. A., 40.
 Whittle, Geo. D., 40.
 Wier, James R., 18.
 Wiggins, Marion S., 46.
 Wight, A. E., 12.
 Wight, W. F., 22.
 Wilcox, A. M., 31.
 Wilcox, Raymond B., 18.
 Wilcox, Roy H., 47.
 Wilder, H. J., 38.
 Wildermuth, V. L., 29.
 Willard, H. F., 30.
 Willard, Rex E., 6.
 Willbanks, N. H., 49.
 Willett, George, 33.
 Willey, Leroy D., 21.
 Williams, A. L., 52.
 Williams, Henry E., 7.
 Williams, Milo B., 41.
 Williams, O. E., 11.
 Williams, R. R., 23.
 Williams, R. W., 5.
 Williams, W. B., 28.
 Williams, W. L., 12.
 Williams, W. M., 5.
 Williamson, Arthur V., 40.
 Willier, J. G., 20.
 Willingmyre, G. T., 44.
 Willis, H. H., 53.
 Wilson, Charles S., 27.
 Wilson, Harry D., 27.
 Wilson, J. B., 23.
 Wilson, P. St. J., 39, 40, 41.
 Wilson, Robert, 21.
 Wilson, T. S., 29.
 Wilson, Thomas R. C., 16.
 Wilson, William M., 9.
 Winchester, H. I., 31.
 Windckelmann, Henry, 19.
 Winkjer, J. W., 11.
 Winslow, C. P., 16.
 Winston, John R., 18.
 Winston, R. A., 28.
 Winter, W. M., 44.
 Wintermeyer, W. E., 11.
 Wise, F. B., 48.
 Wise, Louis E., 19.
 Witmar, E., 26.
 Woglum, R. S., 29.
 Wolcott, G. E., 11.
 Wolfe, S. L., 17.
 Wonders, J. C., 40.
 Wood, C. F., 51.
 Wood, H. P., 31.
 Wood, W. B., 29.
 Wood, W. D., 11.
 Woodbury, T. D., 17.
 Woods, C. N., 17.
 Woodward, H. E., 26.
 Woodward, J. C., 53.
 Woodward, Sherman M., 42.
 Woodward, T. E., 11.
 Woodward, William C., 26.
 Woodworth, F. L., 27.
 Wooldridge, R., 31.
 Woolman, Horace M., 19.
 Woolsey, Ralph B., 50.
 Wooton, E. O., 6.
 Working, D. W., 38.
 Working, E., 25.
 Workman, J. M., 45, 50.
 Worsham, E. Lee, 18.
 Worthley, L. H., 31.
 Wright, Clarence B., 50.
 Wright, C. D., 23.
 Wright, P. A., 11.

Wright, R. C., 10.
Wright, Sewell, 10.
Wright, Turner R. H., 44, 47.
Wright, W. W., 44, 47.
Wulff, E. L., 40.

Yaden, B. E., 40.
Yager, E. P., 12.
Yanovsky, E., 24.
Yarnell, David L., 42.

Yerby, Everett D., 34.
Yerkes, Arnold P., 6.
Yoder, Malon, 48.
Yoder, P. A., 21.
Yothers, M. A., 29.
Yothers, W. W., 29.
Young, A. W., 31.
Young, H. E., 11.
Young, Harry D., 29.
Young, James P., 20.

Young, M. T., 28.
Young, R. A., 22.
Young, R. C., 23.
Young, T. B., 19.
Youngblood, B., 27.

Zappone, A., 33.
Zoller, H. F., 11.
Zon, Raphael, 15.
Zook, L. L., 21.

PART 2.

STATE AGRICULTURAL COLLEGES AND
EXPERIMENT STATIONS.

Prepared in the States Relations Service,
A. C. TRUE, *Director*.

.

OFFICERS OF THE ASSOCIATION OF AMERICAN AGRICULTURAL COLLEGES AND EXPERIMENT STATIONS.

President.—EUGENE DAVENPORT, of Illinois.

Vice Presidents.—C. A. LORY, of Colorado; A. M. SOULE, of Georgia; J. G. LIPMAN, of New Jersey; A. F. WOODS, of Maryland, and R. W. THATCHER, of Minnesota.

Secretary-Treasurer.—J. L. HILLS, of Vermont.

Bibliographer.—A. C. TRUE, of Washington, D. C.

Executive committee.—W. O. THOMPSON, of Ohio, chairman; R. A. PEARSON, of Iowa; W. M. RIGGS, of South Carolina; W. H. JORDAN, of New York, and H. L. RUSSELL, of Wisconsin.

Sections.—Section on College Work and Administration: E. C. PERISHO, of South Dakota, chairman; R. D. HETZEL, of New Hampshire, secretary. Committee on Program: The CHAIRMAN and SECRETARY.

Engineering Division of the College Section: W. M. RIGGS, of South Carolina, chairman; A. A. POTTER, of Kansas, secretary. Committee on Program: The CHAIRMAN and SECRETARY.

Home Economics Division of the College Section: ISABEL BEVIER, of Illinois, chairman; MARY E. SWEENEY, of Kentucky, secretary. Committee on Program: The CHAIRMAN and SECRETARY.

Section on Experiment Station Work: W. M. JARDINE, of Kansas, chairman; W. P. BROOKS, of Massachusetts, secretary; W. H. BEAL, of Washington, D. C., recording secretary. Committee on Program: The CHAIRMAN, the SECRETARY, and the RECORDING SECRETARY.

Section on Extension Work: C. R. TITLOW, of West Virginia, chairman; E. C. JOHNSON, of Kansas, secretary; BRADFORD KNAPP, of Washington, D. C., recording secretary. Committee on Program: The CHAIRMAN, the SECRETARY, and the RECORDING SECRETARY; and (*ex officio*) the CHAIRMAN of the Committee on Extension Organization and Policy.

Standing committees.—Committee on College Organization and Policy: For three years, SAMUEL AVERY, of Nebraska, and W. M. RIGGS, of South Carolina; for two years, R. A. PEARSON, of Iowa, and A. R. HILL, of Missouri; for one year, K. L. BUTTERFIELD, of Massachusetts, chairman, and C. A. LORY, of Colorado.

Committee on Experiment Station Organization and Policy: For three years, EUGENE DAVENPORT, of Illinois, chairman, and C. D. WOODS, of Maine; for two years, F. B. LINFIELD, of Montana, and C. E. THORNE, of Ohio; for one year, B. W. KILGORE, of North Carolina, and E. W. ALLEN, of Washington, D. C.

Committee on Extension Organization and Policy: For three years, W. D. HURD, of Massachusetts, and H. L. RUSSELL, of Wisconsin; for two years, G. I. CHRISTIE, of Indiana, and W. R. DODSON, of Louisiana; for one year, ALVA AGEE, of New Jersey, and C. W. PUGSLEY, of Nebraska, chairman.

Committee on Instruction in Agriculture: For three years, A. C. TRUE, of Washington, D. C., chairman, and T. F. HUNT, of California; for two years, G. A. WORKS, of New York, and A. C. MONAHAN, of Washington, D. C.; for one year, J. F. DUGGAR, of Alabama, and A. V. STORM, of Minnesota.

Committee on Graduate Study: For three years, H. P. ARMSBY, of Pennsylvania, chairman, and EUGENE DAVENPORT, of Illinois; for two years, F. B. MUMFORD, of Missouri, and H. J. WEBBER, of California; for one year, W. O. THOMPSON, of Ohio, and BROWN AYRES, of Tennessee.

Special Committee on Agricultural Terminology: A. C. TRUE and E. W. ALLEN, of Washington, D. C.; C. W. PUGSLEY, of Nebraska; H. P. ARMSBY, of Pennsylvania, and K. L. BUTTERFIELD, of Massachusetts.

JOINT COMMITTEES OF THE ASSOCIATION AND THE U. S. DEPARTMENT OF AGRICULTURE.

Committee on Relations: The COMMITTEE ON STATES RELATIONS of the U. S. Department of Agriculture, and the EXECUTIVE COMMITTEE of the Association.

Committee on Projects: W. A. TAYLOR, J. R. MOHLER, and MILTON WHITNEY, of the U. S. Department of Agriculture; W. R. DODSON, of Louisiana; J. G. LIPMAN, of New Jersey; and F. B. MUMFORD, of Missouri.

Editorial Committee, Journal of Agricultural Research: K. F. KELLERMAN, E. W. ALLEN, and C. L. MARLATT, of the U. S. Department of Agriculture; E. M. FREEMAN, of Minnesota; and H. P. ARMSBY, of Pennsylvania.

KEY TO ABBREVIATIONS.

<i>Acct.</i> , Accountant, Accounts.	<i>Husb.</i> , Husbandry, Husbandman.
<i>Actg.</i> , Acting.	<i>Hyg.</i> , Hygiene.
<i>(Actg.)</i> , Acting Professor.	<i>Indus.</i> , Industry, Industrial, Industries.
<i>(Adjunct)</i> , Adjunct Professor.	<i>Inorg.</i> , Inorganic.
<i>Agr.</i> , Agriculture, Agriculturist, Agricultural.	<i>Insp.</i> , Inspection, Inspector.
<i>Agron.</i> , Agronomy, Agronomist.	<i>Instr.</i> , Instruction, Instructor.
<i>Agt.</i> , Agent.	<i>Insts.</i> , Institutes.
<i>An.</i> , Animal.	<i>Invest.</i> , Investigations, Investigational.
<i>Anal.</i> , Analytical, Analysis.	<i>Irrig.</i> , Irrigation, Irrigationist.
<i>Anat.</i> , Anatomy.	<i>(Junior)</i> , Junior Professor.
<i>Arch.</i> , Architecture.	<i>Lab.</i> , Laboratory.
<i>Assoc.</i> , Associate.	<i>Landsc.</i> , Landscape.
<i>(Assoc.)</i> , Associate Professor.	<i>Lect.</i> , Lecturer.
<i>Asst.</i> , Assistant.	<i>Libr.</i> , Library, Librarian.
<i>(Asst.)</i> , Assistant Professor.	<i>Mach.</i> , Machine, Machinery.
<i>Bact.</i> , Bacteriology, Bacteriologist.	<i>Mech.</i> , Mechanics, Mechanical.
<i>Biol.</i> , Biology, Biologist, Biological.	<i>Met.</i> , Meteorology, Meteorologist.
<i>Bot.</i> , Botany, Botanist, Botanical.	<i>Mfrs.</i> , Manufactures.
<i>Brdg.</i> , Breeding.	<i>Mgr.</i> , Manager.
<i>Chair.</i> , Chairman.	<i>Mgt.</i> , Management.
<i>Chem.</i> , Chemistry, Chemist, Chemical.	<i>Mycol.</i> , Mycology, Mycologist.
<i>Climat.</i> , Climatology, Climatologist.	<i>Nat.</i> , Natural.
<i>Coll.</i> , College.	<i>Nutr.</i> , Nutrition.
<i>Comp.</i> , Comparative.	<i>Oler.</i> , Olericulture, Olericulturist.
<i>Comr.</i> , Commissioner.	<i>Org.</i> , Organic.
<i>Consult.</i> , Consulting.	<i>Ornith.</i> , Ornithology, Ornithologist.
<i>Coop.</i> , Cooperation, Cooperative, Cooperator.	<i>Parasitol.</i> , Parasitology, Parasitologist.
<i>Corresp.</i> , Correspondence, Correspondent.	<i>Path.</i> , Pathology, Pathologist.
<i>Dem.</i> , Demonstration, Demonstrator.	<i>Pedag.</i> , Pedagogy, Pedagogics.
<i>Dept.</i> , Department.	<i>Pharm.</i> , Pharmacy, Pharmacist, Pharmaceutical.
<i>Dir.</i> , Director.	<i>Photog.</i> , Photography, Photographer.
<i>Dist.</i> , District.	<i>Phys.</i> , Physics, Physicist, Physical.
<i>Distrib.</i> , Distribution.	<i>Physiol.</i> , Physiology, Physiologist, Physiological.
<i>Div.</i> , Division.	<i>Pomol.</i> , Pomology, Pomologist, Pomological.
<i>Dom.</i> , Domestic.	<i>Pract.</i> , Practice, Practical.
<i>Econ.</i> , Economy, Economic, Economics.	<i>Prep.</i> , Preparatory.
<i>Ed.</i> , Education.	<i>Pres.</i> , President.
<i>Ele.</i> , Elementary.	<i>Prin.</i> , Principal.
<i>Engin.</i> , Engineer, Engineering.	<i>Prod.</i> , Production, Products.
<i>Ent.</i> , Entomology, Entomologist, Entomological.	<i>Professor</i> , shown by giving subject only, as
<i>Erad.</i> , Eradication.	<i>Agron.</i> , i. e., professor of agronomy.
<i>Expt.</i> , Experiment, Experimentalist, Experimental.	<i>Sci.</i> , Science, Scientific.
<i>Ext.</i> , Extension.	<i>Sec.</i> , Secretary.
<i>(Ext.)</i> , Extension Professor.	<i>Secon.</i> , Secondary.
<i>(Ext. Asst.)</i> , Extension Assistant Professor.	<i>Sociol.</i> , Sociology.
<i>(Ext. Assoc.)</i> , Extension Associate Professor.	<i>Sta.</i> , Station.
<i>Feed.</i> , Feeding.	<i>Substa.</i> , Substation.
<i>Fert.</i> , Fertility, Fertilizer.	<i>Supt.</i> , Superintendent.
<i>Flor.</i> , Floriculture, Floriculturist, Floricultural.	<i>Surg.</i> , Surgery.
<i>For.</i> , Forestry.	<i>Tech.</i> , Technology, Technologist, Technical.
<i>Gard.</i> , Gardening.	<i>Treas.</i> , Treasurer.
<i>Gen.</i> , General.	<i>Trop.</i> , Tropical.
<i>Geol.</i> , Geology, Geologist, Geological.	<i>Univ.</i> , University.
<i>Grad.</i> , Graduate.	<i>Veg.</i> , Vegetable, Vegetation.
<i>Histol.</i> , Histology.	<i>Vet.</i> , Veterinary, Veterinarian.
<i>Hort.</i> , Horticulture, Horticulturist, Horticultural.	<i>Vit.</i> , Viticulture, Viticulturist, Viticultural.
	<i>Voc.</i> , Vocational.
	<i>Zool.</i> , Zoology, Zoologist.

STATE AGRICULTURAL COLLEGES AND EXPERIMENT STATIONS.

ALABAMA.

Alabama Polytechnic Institute and the Agricultural Experiment Station. Auburn.

*College faculty. †Station staff. ‡Extension staff.

*C. C. Thach, A. M., LL. D., *President.*

*†‡J. F. Duggar, M. S., *Dir. of Sta. Dir. Ext. Work. Agron. (*†)*

- *P. F. Bahnsen, V. S., *Lect. Phys. Diagnosis.*
- *Thomas Bragg, M. S., (*Assoc.*) *Chem.*
- †D. J. Burleson, M. S., *Ext. Agron.*
- ‡Marjorie P. Camper, *Asst. Home Dem. Agt.*
- *†C. A. Cary, B. S., D. V. M., *Physiol., Dean Vet. Med. and Surg.; Vet. (State Vet.). Dir. Farmers' Insts.*
- †E. F. Cauthen, B. S., *Assoc. Agron.*
- †C. L. Chambers, B. S., *Field Agt. in Marketing (Coop. U. S. D. A.).*
- *†L. N. Duncan, M. S., *School Agr. Supt. of Junior and Home Econ. Ext. Work.*
- ‡Mary Fennear, B. S., *State Home Dem. Agt.*
- *C. W. Ferguson, D. V. M., M. D. C., *Instr. Vet. Med.*
- †C. G. Filler, B. S., *Beef Cattle Expert (Coop. U. S. D. A.).*
- †J. C. Ford, M. S., *Pig Club Agt. (Coop. U. S. D. A.).*
- *†M. J. Funchess, M. S., *Agron.; Assoc. Agron.*
- *†W. A. Gardner, Ph. D., *Bot and Plant Physiol.; Bot.*
- *C. P. Gaston, D. V. M., *Supervisor Serum Lab.*
- *†‡M. A. Glenn, *Treas.*
- †Ernest Gibbens, B. S., *Asst. in Beef Husb. (Allenville).*
- *†C. L. Hare, M. S., *Physiol. Chem.; Chem.*
- *†‡W. E. Hinds, Ph. D., *Ent.*
- †Mary E. Keown, M. S., *Asst. Home Dem. Agt.*
- *W. M. Llewellyn, D. V. M., *Instr. Histol.*
- *I. S. McAdory, B. S., D. V. M., (*Asst.*) *Vet. Sci.*
- *H. M. Martin, M. S., *Asst. Chem.*
- *†Mary Martin, *Asst. Libr.*
- *†A. B. Massey, B. S., (*Asst.*) *Bot.; Asst. Bot.*
- †F. O. Montague, *Agt. in An. Husb.*
- †C. E. Newman, B. S., *Corn Club Agt.*
- †‡M. H. Pearson, B. S., *Asst. in Agron.*
- †G. L. Peltier, Ph. D., *Plant Path.*
- *P. P. Powell, M. S., (*Asst.*) *Chem.*
- *†‡J. C. C. Price, B. S., (*Assoc.*) *Hort.; Assoc. Hort.*
- †J. P. Quinerly, B. S., *Dairyman (Coop. U. S. D. A.).*
- *†B. B. Ross, M. S., *Chem., Dean Agr. Sci., (State Chem.).*
- *J. R. Rutland, A. B., *Libr.*
- †‡O. H. Sellers, B. S., *Asst. Agron. Sec. to Dir.*
- *†‡G. C. Starcher, B. Agr., *Hort. (State Hort.)*
- *†‡G. S. Templeton, B. S., *An. Husb.*
- *†F. L. Thomas, Ph. D., (*Asst.*) *Ent., Asst. Ent.*
- ‡Louise S. Thomas, *Asst. State Home Dem. Agt., Girls' Work.*
- †‡H. B. Tisdale, M. S., *Assoc. in Plant Brdg. (Coop. U. S. D. A.).*
- †‡D. C. Warren, A. M., *Ent. Field Agt.*
- †J. J. Watson, Ph. D., *Specialist in Farm Finance and Marketing (Coop. U. S. D. A.).*
- †J. T. Watt, *State Agt.*
- *G. R. White, M. D., D. V. S., *Lect. on An. Restraint and Surg.*
- *W. Williams, D. V. M., *Instr. Physiol., Therapeutics.*
- †J. T. Williamson, B. S., *Field Agt. in Agron.*
- †H. C. Wilson, D. V. M., *Hog Cholera Expert (Coop. U. S. D. A.).*

NOTE.—These lists were compiled by Mary A. Agnew and Althea E. Thacker, of the States Relations Service. They include only names of persons directly engaged in teaching, investigation, or demonstration in agriculture and home economics.

The names are arranged alphabetically for each institution. This arrangement, with the name index at the end of the lists, it is thought, will facilitate the finding of names, especially in the longer lists. An asterisk (*) indicates a college officer, a dagger (†) a station officer, and a double dagger (‡) an extension worker. When the title of the position in the station differs from that in the college the latter is given first, except in the case of the director of the station. A key to the abbreviations used is given on page 4.

Canebrake Agricultural Experiment Station, Uniontown.†J. M. Burgess, B. S., *Director*.**Agricultural and Mechanical College for Negroes, Normal.**

*College faculty. ‡Extension staff.

*W. S. Buchanan, B. A. S., A. M., *President*. *Geol.**Birdie O. Bird, *Home Decoration*.*L. E. Graves, B. S., *Dairying, Agr. Chem., Biol.**W. T. Gravitt, *Farm Mgr., Field Crops*.*H. C. Hopkins, M. S., *Ele. Agr.**Rosa C. Lattimer, A. B., *Housekeeping*.*Callie McDonald, B. Ped., *Dom. Sci.**Miss W. W. Maddux, *Dressmaking*.*†P. C. Parks, B. S., *Boy's Club Agt.**Mrs. Cornelia J. Pickett, *Laundry*.*Mrs. F. J. Rogers, A. B., *Libr.*‡Susan T. Whitfield, *Home Econ. Ext.***Agricultural School and Agricultural Experiment Station of the Tuskegee Normal and Industrial Institute, Tuskegee Institute.**

*College faculty. †Station staff. ‡Extension staff.

*R. R. Moton, *Principal*.*†G. R. Bridgeforth, B. S., *Dir. of Agr. Dept. Dir. Agr. Ext.*†G. W. Carver, M. S., *Dir. of Sta. Dept. of Research. Consult. Chem.**†Cleveland Abbott, *Asst. in Agr. Instr.**†R. C. Atkins, *Dairy Husb., Dairying*.†V. M. Barnett, *Asst. to Dir. of Ext.**H. B. Benson, *Canning*.*†J. H. Bias, D. V. M., *Vet.**St. Elmo Brady, Ph. D., *Chem.**Mary E. Brown, *Sewing and Cooking*.*C. J. Calloway, *Dir. of School Ext.**†F. H. Cardozo, *Asst. Dir. Agr. Dept.*†N. Juanita Coleman, *Home Econ. Ext.**†T. N. Cowen, *Farm Supt.**Mary E. Davis, *Housekeeping*.*Minnie E. Davis, *Housekeeping*.*†E. C. Dobbs, *Asst. to Farm Supt.**Ophelia M. Donaldson, *Laundrying*.†C. W. Greene, *Agr. Ext. Dem. Agt.**Della D. Harris, *Ladies' Tailoring*.*†W. W. Hayes, *Asst. Farm Supt.**Henry Howard, *Gardening*.*J. J. Jones, *Agr. Bookkeeper*.*Hattie E. King, *Plain Sewing, Dressmaking*.*Caroline C. Owens, *Home Crafts*.*†N. D. Ricks, *Fruit Growing*.*Mary B. Scott, *Housekeeping*.*H. W. Seals, *Milling*.*Ernestine Suarez, *Libr.**Lorena C. Taylor, *Dom. Sci.**Cornelia A. Vivian, *Millinery*.*Susie M. Waggener, *Dom. Sci.**Mrs. B. T. Washington, *Dir. Women's Indus.**B. T. Washington, jr., *Asst. to Dir. School Ext.**†L. J. Watkins, *Road Bldg., Survey*.*†G. D. White, *Poultry Husb.**†J. E. Whitfield, *Swine Husb.**D. A. Williston, B. S., *Bot., Dir. Dept. of Landsc. Gard.**†Matthew Woods, *Horse Husb.***ALASKA.****Agricultural Experiment Stations, Sitka, Kodiak, Rampart, Fairbanks, and Matanuska.**

Under the supervision of the Office of Experiment Stations, States Relations Service, United States Department of Agriculture.

†Station staff.

†C. C. Georgeson, Sc. D., *Agronomist in charge, Sitka*.†G. W. Gasser, B. S., *Asst. in charge, Rampart*.†H. S. Loyd, B. S., *An. Husb., Kodiak*.†H. E. Pratt, B. S., *Asst. in charge, Kodiak*.†F. E. Rader, B. S., *Asst. in charge, Matanuska*.†M. D. Snodgrass, B. S., *Asst. in charge, Fairbanks*.†W. T. White, B. S., *Asst., Fairbanks*.

ARIZONA.

College of Agriculture and the Agricultural Experiment Station of the University of Arizona, Tucson.

*College faculty. †Station staff. ‡Extension staff.

*R. B. von KleinSmid, A. M., D. Sc., *President of University.*
———, *Dean Coll. of Agr. Dir. of Sta.*‡E. P. Taylor, M. S., *Dir. of Agr. Ext. Service. State Leader of County Agents.*

- *Anna Bishop, *Instr. Home Econ.*
- *P. H. M. Brinton, Ph. D., *Anal. Chem.*
- *J. G. Brown, Ph. D., (*Asst.*) *Biol.*
- *†W. E. Bryan, M. S., (*Asst.*) *Plant Brdg.; Asst. Plant Breeder.*
- *†C. N. Catlin, A. M., (*Asst.*) *Chem.; Asst. Chem.*
- *†W. S. Cunningham, B. S., (*Asst.*) *An. Husb.; Asst. An. Husb.*
- *A. E. Douglass, Sc. D., *Phys.*
- *H. W. Estil, M. S., *Instr. Chem.*
- *†G. F. Freeman, Sc. D., *Plant Brdg.*
- *F. N. Guild, Ph. D., *Chem.*
- †N. L. Harris, *Poultry Specialist.*
- *†H. C. Heard, B. S., (*Asst.*) *Agron.; Asst. Agron.*
- ‡Agnes A. Hunt, B. S., *Asst. in Girls' Club Work.*
- *†S. B. Johnson, B. S., (*Asst.*) *Hort.; Asst. Hort.*

- *Estelle Luttrell, A. B., *Libr.*
- *C. A. Meserve, Ph. D., *Bact. and Food Chem. (State Chem.)*
- †A. W. Morrill, Ph. D., *Consult. Ent. (State Ent., Phoenix.)*
- ‡L. S. Parke, *State Club Leader.*
- †G. E. P. Smith, C. E., *Irrig. Engin.*
- *DeRossette Thomas, B. S., (*Assoc.*) *Home Econ.*
- *†J. J. Thornber, M. A., *Bot.*
- *†A. E. Vinson, Ph. D., *Agr. Chem.; Biochem.*
- *C. T. Vorhies, Ph. D., *Zool.*
- †H. E. Webber, *Asst. in Plant Brdg.*
- *Jessamine C. Williams, B. S., (*Asst.*) *Home Econ.*
- *†R. H. Williams, Ph. D., *An. Husb.*

ARKANSAS.

College of Agriculture and the Agricultural Experiment Station of the University of Arkansas, Fayetteville.

*College faculty. †Station staff. ‡Extension staff.

*J. C. Futrall, A. M., *President of University.**†Martin Nelson, M. S., *Dean Coll. of Agr. Dir. of Sta.*‡W. C. Lassetter, B. S., *Dir. Ext. Work.*

- *†R. H. Austin, B. S., *Soil Analyst.*
- *†W. E. Ayres, M. S. (*Asst.*) *Agron.; Asst. Agron.*
- *†G. G. Becker, B. S. (*Asst.*) *Ent.; Ent.*
- †Connie J. Bonslagel, A. B., *State Home Dem. Agt. (Little Rock).*
- *†J. R. Cooper, A. M., *Hort.*
- *†H. E. Dvorachek, B. S., *An. Husb. and Dairying, Head An. Husb. Dept.*
- *Ruth O. Dyche, A. B., *Instr. Home Econ*
- *†J. A. Elliott, Ph. D., *Plant Path., Head Dept. of Plant Path.*
- *†W. S. Fields, B. S. A., (*Asst.*) *Plant Path.; Asst. Plant Path.*
- ‡Lawrence Foot, *Specialist in Meat Packing (Little Rock).*
- *Margaret Galloway, *Libr.*
- *†R. M. Gow, D. V. M., *Vet. Sci., Head Dept. Vet. Sci. (State Vet., Little Rock).*
- *J. S. Guy, Ph. D., *Chem.*
- *†F. H. Herzer, B. S., *Instr. An. Husb.; Asst. An. Husb. (Dairying).*

- *†DeForest Hungerford, M. S., (*Asst.*) *Agron.; Asst. Agron.*
- †W. J. Jernigan, B. A., *State Boys' and Girls' Club Agt. (Little Rock).*
- †V. H. Kern, *Farm Mach.*
- †V. W. Knowles, D. V. M., *Hog Cholera Control.*
- †J. S. Knox, M. S., *Specialist in Hort.*
- †J. H. McLeod, M. S., *Specialist in An. Husb. (Little Rock).*
- †A. D. McNair, *Specialist in Farm Mgt. (Little Rock).*
- *E. B. Mathew, M. S., *Head Dept. of Agr. Ed.*
- *H. E. Morrow, B. S., (*Assoc.*) *Chem.*
- †J. F. Nicholson, M. S., *Specialist in Marketing (Coop. U. S. D. A., Little Rock).*
- *E. G. Nourse, Ph. D., *Agr. Econ., Head Dept. of Agr. Econ.*
- *†L. W. Osborn, B. S., (*Asst.*) *Agron., Asst. Agron.*

- | | |
|---|---|
| <p>†J. B. Parker, <i>Specialist in Dairy Husb.</i>
 *F. W. Pickel, M. S., <i>Biol., Head Dept. of Biol.</i>
 *J. B. Rather, M. S., <i>Agr. Chem., Head Dept. of Agr. Chem.</i>
 *†R. H. Rldgell, B. S., <i>Instr. Agr. Chem.; Asst. Chem.</i>
 †B. C. Riley, B. S., <i>Pub. Editor.</i>
 *G. E. Ripley, M. S., <i>Phys.</i>
 †H. K. Sanders, B. S., <i>Specialist in Pig Club Work (Little Rock).</i></p> | <p>*†H. A. Sandhouse, B. S., <i>Instr. An. Husb.; Asst. An. Husb.</i>
 †Louis Sawyer, <i>Specialist in An. Husb.</i>
 *R. G. Scriber, D. V. M., <i>Asst. State Vet. (Little Rock).</i>
 *Ruth Speerstra, B. S. H. E., <i>Actg. Head Dept. of Home Econ.</i>
 *†S. R. Stout, B. S., <i>Instr. An. Husb. (Poultry); Asst. An. Husb.</i>
 †C. D. Stubbs, D. V. M., <i>Asst. Vet. (Little Rock).</i>
 †C. W. Watson, <i>State Agt. (Little Rock).</i></p> |
|---|---|

Branch Normal College, Pine Bluff.

*College faculty.

*J. G. Ish, jr., A. B., *Superintendent.*

- | | |
|---|--|
| <p>*Mrs. Dora W. Adair, <i>Head Dept. of Home Econ., Instr. Cooking, Millinery.</i>
 *Larnie Leonard, <i>Instr. Agr.</i>
 *Ailer Lewis, <i>Instr. Sewing.</i>
 *C. P. McLurkin, A. M., <i>Instr. Agr. and Household Chem.</i></p> | <p>*N. A. Murray, <i>Instr. Hort., School Gard. Agr.</i>
 *Mrs. M. S. Nottingham, <i>Instr. Cooking.</i>
 *Julia H. Skinner, <i>Instr. Sewing, Laundering, Nursing.</i>
 *Reuben Temple, <i>Instr. Agr. and Dairying</i></p> |
|---|--|

CALIFORNIA.

College of Agriculture and the Agricultural Experiment Station of the University of California,¹ Berkeley.

*College faculty. †Station staff. ‡Extension staff.

*B. I. Wheeler, Ph. D., LL. D., *President of University.*

*†T. F. Hunt, D. Agr., D. Sc., *Dean Coll. of Agr. Dir. of Sta. Agr. (*†)*

‡W. T. Clarke, B. S., *Agr. Ext. Supt. Farmers' Insts.*

- | | |
|---|--|
| <p>†Frank Adams, M. A., <i>Irrig. Invest.</i>
 *†R. L. Adams, M. S., (<i>Assoc.</i>) <i>Agron.</i>
 *†F. W. Albro, B. S., <i>Instr. Nutr.</i>
 *†E. B. Babcock, M. S., <i>Genetics.</i>
 *†H. S. Baird, B. S., (<i>Asst.</i>) <i>Dairy Indus. (Davis).</i>
 †G. Barovetto, <i>Field Asst. in Vit. (Davis).</i>
 *†J. T. Barrett, Ph. D., <i>Plant Path. (Riverside).</i>
 *††L. D. Batchelor, Ph. D., <i>Plant Brdg. (Riverside).</i>
 *W. E. Bates, M. D., <i>Lect. in Hyg. (Davis).</i>
 *†J. R. Beach, D. V. M., <i>Instr. Vet. Sci.</i>
 *†S. H. Beckett, B. S., (<i>Asst.</i>) <i>Irrig. Practice (Coop. U. S. D. A., Davis).</i>
 *†H. L. Belton, <i>Instr. Shop Work (Davis).</i>
 *†F. T. Bioletti, M. S., <i>Vit., Enology.</i>
 *†Agnes E. Brown, A. B., <i>Libr., Univ. Farm (Davis).</i>
 *†Donald Bruce,² M. F., (<i>Asst.</i>) <i>For.</i>
 †V. C. Bryant, M. S., (<i>Asst.</i>) <i>Agr. Ext.</i>
 *†Mrs. D. L. Bunnell, <i>Libr.</i>
 *†J. S. Burd, B. S., <i>Agr. Chem. (Fert. Control).</i>
 †O. F. Burger, D. Sc., <i>Instr. Plant Path. (Riverside).</i></p> | <p>†D. H. Carey, B. S., <i>Instr. Flor., Supt Greenhouses and Gardens.</i>
 *†A. W. Christie, M. S., <i>Instr. Agr. Chem.</i>
 †Lillian D. Clark, <i>Instr. Agr. Ext.</i>
 *†R. E. Clausen,² Ph. D., (<i>Asst.</i>) <i>Genetics.</i>
 *†G. A. Coleman, M. A., <i>Instr. Ent.</i>
 *†I. J. Condit, B. S., (<i>Asst.</i>) <i>Citriculture.</i>
 †B. H. Crocheron, M. S. A., (<i>Assoc.</i>) <i>Agr. Ext. State Leader.</i>
 *†W. V. Cruess, B. S., (<i>Asst.</i>) <i>Zymology.</i>
 †Mrs. Mary Davenport, <i>Asst. in Agr. Ext.</i>
 *†J. B. Davidson, M. E., A. E., <i>Agr. Enghn. (Davis).</i>
 *†W. C. Dean, B. S., <i>Instr. Soil Tech.</i>
 *†S. L. Denning, B. S., <i>Instr. Dairy Husb. (Davis).</i>
 †J. A. Denny, <i>Foreman in Cereal Work, Fresno.</i>
 *†E. R. de Ong, B. S., <i>Instr. Ent.</i>
 †W. H. Dore, B. S., <i>Asst. Chem. (Fert. Control).</i>
 *†J. E. Dougherty, B. S., (<i>Assoc.</i>) <i>Poultry Husb. and Chief of Poultry Div. (Davis).</i>
 *C. F. Elwood, B. S., <i>Instr. Agr. Ext.</i>
 *†H. S. Fawcett,² M. S., (<i>Assoc.</i>) <i>Plant Path. (Riverside).</i></p> |
|---|--|

¹ This institution gives the academic title of all employees.

² On leave.

- *†G. E. Fermery, *Asst. in Agr. Engin.* (Davis).
- *†L. J. Fletcher, B. S., *Instr. Agr. Engin.* (Davis).
- *†F. C. H. Flossfeder, *Instr. Vit.* (Davis).
- †Mrs. M. N. Fowler, B. S., *Asst. in Agr. Ent.*
- *†S. B. Freeborn, B. S., *Instr. Ent.*
- *†H. B. Frost, Ph. D., *Instr. Plant Brdg.* (Riverside).
- *†W. F. Gerlicke, M. S., (*Asst.*) *Soil Chem., Bact.*
- *†J. W. Gilmore, M. S. A., *Agron.*
- *†G. P. Gray, M. S., (*Asst.*) *Ent.; Chem. Insecticides Lab.*
- *†J. W. Gregg, B. S., *Landsc. Gard., Flor.*
- †R. M. Hagen, B. S., *Instr. Agr. Ent.*
- *†H. M. Hall, Ph. D. (*Assoc.*) *Bot.*
- *†C. M. Haring,¹ D. V. M., *Vet. Sci.*
- *G. H. Hart, V. M. D., M. D., (*Assoc.*) *Vet. Sci.*
- *†F. M. Hayes, D. V. M., (*Asst.*) *Vet. Sci.* (Davis).
- *†A. H. Hendrickson, B. S., (*Asst.*) *Pomol.*
- *†G. W. Hendry, B. S., (*Asst.*) *Agron.*
- *†W. B. Herms,¹ M. A., (*Assoc.*) *Parasitol.*
- *†P. L. Hibbard, B. S., (*Asst.*) *Chem.; Chem. in Fert. Control.*
- †Cora J. Hill, B. L., *Asst. in Dairy Testing.*
- *†D. R. Hoagland, M. S., (*Asst.*) *Agr. Chem.*
- *†R. W. Hodgson, M. S., *Instr. Citriculture.*
- *†W. T. Horne, B. S., (*Assoc.*) *Plant Path.*
- *†W. L. Howard, Ph. D., (*Assoc.*) *Pomol.* (Davis).
- *†W. G. Hummel, M. S., (*Assoc.*) *Agr. Ed.*
- †T. Fr. Hunt, B. S., (*Asst.*) *Agr. Ent., Asst. Supt. Farmers' Insts.*
- *†R. C. Ingram, *Instr. Shop Work* (Davis).
- *†M. E. Jaffa, M. S., *Nutr.*
- *†Katherine D. Jones, B. S., *Asst. in Landsc. Gard.*
- *†W. P. Kelley, Ph. D., *Agr. Chem.* (Riverside).
- *†P. B. Kennedy, Ph. D., (*Assoc.*) *Agron.*
- *†O. J. Kern, (*Asst.*) *Agr. Ed.*
- *†E. J. Lea, M. S., (*Assoc.*) *Nutr.*
- *†C. B. Lipman, Ph. D., *Soil Chem., Bact.*
- *†W. E. Lloyd, B. S., *Instr. Poultry Husb.* (Davis).
- *†B. A. Madson, B. S. A., (*Asst.*) *Agron.* (Davis).
- *†J. C. Martin, B. S., *Asst. in Agr. Chem.*
- *†D. T. Mason,¹ M. S., M. F., *For.*
- *†H. A. Matill,¹ Ph. D., (*Asst.*) *Nutr.*
- *†Elwood Mead, D. E., *Rural Institutions.*
- †W. M. Mertz, *Supt. of Cultivations* (Riverside).
- *†Woodbridge Metcalf, M. S. F., (*Asst.*) *For.*
- †M. R. Miller, B. S., *Asst. Chem. (Insecticide and Fungicide Control).*
- *†R. F. Miller, M. S., (*Asst.*) *An. Husb.* (Davis).
- *†J. G. Moody, B. S., (*Asst.*) *Agr., Asst. to Dean.*
- *†D. N. Morgan, B. S., (*Assoc.*) *Agr.; Asst. to Dir.*
- *†Walter Mulford, F. E., *For.*
- *†J. W. Nelson, B. S., (*Asst.*) *Soil Tech.*
- *†J. H. Norton, M. S., *Instr. Chem.* (Davis).
- *†W. E. Packard, M. S., (*Asst.*) *Agr. Ent.*
- *P. T. Petersen, D. V. M., *Instr. Vet. Sci. in charge of Serum Mfr.*
- *W. T. Pope, M. S., *Instr. Bot.* (Davis).
- *†M. B. Pratt, M. F., (*Asst.*) *For.*
- *†H. J. Quayle, M. S., *Ent.* (Riverside).
- *†H. S. Reed, Ph. D., *Plant Physiol.* (Riverside).
- *†C. L. Roadhouse, D. V. M., *Dairy Indus.* (Davis).
- *W. C. Roberts, B. S., *Asst. in Soil Chem.*
- *†S. S. Rogers, B. S., (*Assoc.*) *Oler.* (Davis).
- *†R. P. Royce, B. S., *Instr. An. Husb.* (Davis).
- †Richard Schmidt, *Orchardist* (Davis).
- *†W. A. Setchell, Ph. D., *Bot.*
- *†H. P. Severin, Ph. D., *Instr. Ent.*
- †L. T. Sharp, B. S., (*Asst.*) *Soil Chem., Bact.*
- *C. H. Shattuck, Ph. D., *For.*
- *†C. F. Shaw, B. S., *Soil Tech.*
- *†Alfred Smith, M. A., (*Asst.*) *Soil Tech.*
- †C. O. Smith, M. S., *Instr. Plant Path.* (Riverside).
- *†Elizabeth H. Smith, M. S., (*Asst.*) *Plant Path.*
- *†R. E. Smith, B. S., *Plant Path.*
- *†R. T. Stevens,¹ B. S., (*Asst.*) *Landsc. Gard. and Flori.*
- *†G. R. Stewart, B. S., (*Asst.*) *Agr. Chem.*
- *†A. F. Swain, M. S., *Asst. in Ent.* (Riverside).
- *†W. L. Sweet, M. S., *Instr. Pomol.*
- *†Thomas Tavernetti, B. S., (*Asst.*) *Farm Practice* (Davis).
- *†R. H. Taylor, B. S., (*Asst.*) *Pomol.*
- †E. E. Thomas, B. S., *Asst. Chem.* (Riverside).
- *†J. I. Thompson, B. S., (*Asst.*) *An. Husb.* (Davis).
- *†Jacob Traum, D. V. M., (*Asst.*) *Vet. Sci.*
- *†G. H. True, B. S., *An. Husb.* (Davis).
- *†W. P. Tufts, M. S., (*Asst.*) *Pomol.* (Davis).
- ††R. S. Vaile, B. A., (*Asst.*) *Orchard Mgt.* (Riverside).
- *†E. C. Van Dyke, B. S., M. D., (*Asst.*) *Ent.*
- *†H. E. Van Norman, B. S., *Dairy Mgt., Dean Univ. Farm School, Vice Dir. of Sta.* (Davis).
- *†E. C. Voorhies,¹ B. S., (*Asst.*) *An. Husb.* (Davis).
- †A. E. Way, *Asst. Vit.* (Fresno).

¹ On leave.

*†D. D. Waynick, Ph. D., *Instr. Soil Chem. and Bact.*

*†H. J. Webber, Ph. D., D. Agr., *Plant Brdg., Dean Grad. School of Tropical Agr., Dir. Citrus Sta., Riverside.*

†W. W. Weir, (Asst.) *Soil Tech.*

*†E. J. Wickson, M. A., *Hort. Emeritus.*

*W. W. Wobus, B. S., *Asst. in Agr. Ed.*

*†F. W. Woll, Ph. D., *An. Nutr. (Davis).*

*†M. N. Wood, B. S., *Asst. in Pomol.*

*†C. W. Woodworth, M. S., *Ent.*

*†J. R. Zion, B. S., *Asst. in Vit.*

COLORADO.

The State Agricultural College of Colorado and the Agricultural Experiment Station, Fort Collins.

*College faculty. †Station staff. ‡Extension staff.

*C. A. Lory, M. S., LL. D., D. Sc., *President.*

*C. P. Gillette, D. Sc., *Dir. of Sta. Zool., Ent. (*†)*

†H. T. French, M. S., *Dir. Ent. Service.*

†J. W. Adams, B. S. *Asst Agron. (Dry Land Invest.), Cheyenne Wells.*

*Inga M. K. Allison, E. B., *Home Econ.*

*Charlotte A. Baker, *Libr.*

†J. D. Bell, B. S., *Asst. Irrig. Invest.*

†P. K. Blinn, B. S., *Alfalfa Invest., Ark. Valley Substa., Rockyford.*

*†R. F. Bourne, B. S., D. V. S., *Vet. Physiol.*

†Breeze Boyack, M. S., *Asst. Agron.*

†L. C. Bragg, *Asst. Ent.*

*†C. I. Bray, M. S., (Assoc.) *An. Husb.; Asst. An. Husb.*

*Charlotte E. Carpenter, (Asst.) *Home Econ.*

†F. A. Chisholm, B. S., *Asst. Hort.*

†R. W. Clark, B. Agr., *Specialist in An. Husb.*

†V. M. Cone, B. S. C. E., *Irrig. Invest. (Detailed U. S. D. A.)*

*†J. T. Copeland, B. S., *Instr. Farm Mech.; Asst. in Farm Mech.*

*††R. L. Crosman, *Editor.*

*Beryl Dixon, B. S., *Instr. Home Econ.*

†Earl Douglass, M. S., *Asst. Chem.*

†G. E. Eggington, B. S., *Seed Analyst.*

*Wm. Feldman, D. V. M., *Instr. Vet. Med.*

†W. E. Foard, M. S., *Specialist in Farm Mgt. Dem.*

*L. S. Foltz, M. S., *Instr. Phys.*

*L. F. Garey, A. M., (Assoc.) *Agron.*

*†G. H. Glover, M. S., D. V. M., *Vet. Med.; Vet.*

*F. P. Goeder, B. S., (Assoc.) *Phys.*

*H. Goodacre, *Instr. Hort., Florist.*

††R. B. Grabill, *Asst. in Markets and Marketing (Denver).*

*H. Magdalene Hahn, M. A. *Instr. Home Econ.*

*†E. Gertrude Halliday, B. S., *Instr. Home Econ.; Home Econ.*

†Miriam M. Haynes, B. S., *State Leader in Home Econ.*

*†W. P. Headen, Ph. D., *Chem., Geol.; Chem.*

*†I. C. Hoffman, M. S., (Asst.) *Hort.; Asst. Hort.*

*†E. B. House, B. S. in E. E., M. S., *Irrig. Engin.*

†Herbert Howarth, *Asst. in Horse Brdg. (Detailed U. S. D. A.)*

†James Hutton, *Asst. Horse Brdg. (Detailed U. S. D. A.)*

*†S. A. Johnson, M. S., (Assoc.) *Zool., Ent., Dean of Faculty; Asst. Ent.*

*†C. R. Jones, M. S., (Assoc.) *Zool., Ent.; Asst. Ent.*

††W. H. Kerr, A. B., J. D., *Markets and Marketing (Denver).*

*†Alvin Kezer, M. A., *Agron., Farm Mgr.*

*Louise Lacey, B. S., *Instr. Home Econ.*

*Nellie M. Killgore, B. S., *Instr. Home Econ.*

*H. E. Kingman, B. S., D. V. S., *Vet. Surg.*

†T. E. Leiper, B. S., *Asst. An. Husb.*

*†G. M. List, B. S., *Instr. Ent.; Asst. Ent.*

*†B. O. Longyear, B. S., (Assoc.) *For.; Asst. For.*

†A. E. Lovett, B. S., *State Leader of County Agts.*

*†R. A. McGinty, B. S., (Assoc.) *Hort.; Asst. Hort.*

*J. D. Marshall, B. S., (Assoc.) *Agron.*

*W. J. Morrill, M. F., *For. (State For.).*

*†G. E. Morton, M. S., *An Husb.*

*T. M. Netherton, A. M., *Prin. School of Agr.*

*†I. E. Newsom, B. S., D. V. S., *Vet. Path.*

†Miriam A. Palmer, M. A., *Illustrator.*

†R. L. Parshall, B. S., *Asst. Irrig. Invest.*

*Oliver Pennock, B. S., (Assoc.) *Irrig. Engin.*

*†F. G. Person, A. M., *Phys.*

†O. S. Rayner, B. S. A., *Asst. State Leader of County Agts.*

*†W. W. Robbins, Ph. D., *Bot.*

*Elizabeth Robinson, B. A., *Instr. Zool., Ent.*

†W. G. Sackett,¹ B. S., *Bact.*

*†E. P. Sandsten, Ph. D., *Hort.*

*†C. G. Sargent, Pd. M., *Rural and Indus. Ed., Specialist in Rural Ed.*

*W. J. Scott, D. V. M., *Instr. Vet. Anat.*

¹ On leave.

‡Maude E. Sheridan, M. Pd., *Asst. State Leader Boys' and Girls' Clubs.*
 †R. E. Trimble, B. S., *Asst. Irrig. Invest.*
 *R. H. Tucker, B. S., *Instr. An. Husb.*
 ‡W. E. Vaplon, *State Leader Boys' and Girls' Clubs.*

*†H. E. Vasey, A. M., (*Asst.*) *Bot., Mycol.; Asst. Bot.*
 *G. H. Whiteford, Ph. D., (*Assoc.*) *Chem.*
 *Maryetta Wilson, B. S., *Instr. Home Econ.*

CONNECTICUT.

Connecticut Agricultural College and the Storrs Agricultural Experiment Station, Storrs (telegraph address, Storrs via Willimantic; railroad station and express address, Eagleville).

*College faculty. †Station staff. ‡Extension staff.

*C. L. Beach, B. Agr., B. S., *President.*
 †E. H. Jenkins, Ph. D., *Dir. of Sta. (New Haven).*
 ‡H. J. Baker, B. S., *Dir. Ext. Service.*

‡M. F. Abell, B. S., *Farm Mgt. Dem.*
 †Helen Bolan, *Asst. State Club Leader.*
 †B. A. Brown, *Supt. of Plats.*
 †A. J. Brundage, *in charge Boys' Clubs.*
 *G. H. Campbell, B. S., *Editor Information Service.*
 †L. E. Card, B. S., *Asst. Poultry Husb.*
 *Margaret Costello, B. S., *Instr. Home Econ.*
 †I. G. Davis, B. A., *State Leader and Farm Mgt. Dem.*
 *B. K. Dow, V. S., *Lect. Vet. Sci.*
 *F. W. Duffee, B. S., *Instr. Agr. Engin.*
 *†T. H. Eaton, Ph. D., *Agr. Ed.*
 †H. D. Edmond, B. S., *Chem.*
 *W. M. Esten, M. S., *Dairy Bact.*
 *G. W. Fraser, *Instr. Hort.*
 *H. L. Garrigus, B. Agr., *An. Husb., Farm Supt.*
 *†Maud E. Hayes, A. M., *Home Econ.*
 *†S. P. Hollister, B. S. A., *Instr. Hort.*
 *J. L. Hughes, A. M., *Instr. Chem.*
 †R. E. Jones, *Poultryman.*
 *†H. F. Judkins, B. S., (*Assoc.*) *Dairy Husb.; Asst. Dairy Husb.*

*†W. F. Kirkpatrick, B. E., B. Agr., *Poultry Husb.*
 *†G. H. Lamson, jr., M. S., *Ent., Zool.; Zool.*
 †B. A. McDonald, B. S., *Asst. Farm Mgt. Dem.*
 *J. A. Manter, B. S., *Instr. Zool., Ent.*
 *Miss C. J. Mason, B. Agr., *Instr. Bact.*
 *A. E. Moss, M. F., *Instr. For.*
 †K. B. Musser, A. M., *Dairyman.*
 *H. D. Newton, Ph. D., *Chem.*
 *H. B. Price, A. M., *Instr. Agr. Econ.*
 †L. F. Rettger, Ph. D., *Bact. (Poultry Invest.).*
 †J. A. Simms, B. S., *Swine Work.*
 *E. W. Sinnott, Ph. D., *Bot., Genetics.*
 *†W. L. Slate, jr., B. S., *Agron.*
 *†G. C. Smith, Ph. B., *Agr. Econ.*
 ††B. G. Southwick, B. S., *Asst. Agron.*
 †M. Estella Sprague, *Girls' Club Work.*
 *A. T. Stevens, M. S., *Instr. Hort.*
 *Corinne R. Tapley, *Instr. Home Econ.*
 *G. S. Torrey, A. M., *Instr. Bot.*
 *D. E. Warner, B. S., *Instr. Poultry Husb.*
 *†G. C. White, M. A., *Dairy Husb.*
 *Edwina M. Whitney, Ph. B., *Libr.*

Connecticut State Agricultural Experiment Station, New Haven.

†Station staff.

†E. H. Jenkins, Ph. D., *Dir. of Sta.*

†E. M. Bailey, Ph. D., *First Asst. Chem.*
 †W. E. Britton, Ph. D., *Ent. (State Ent.)*
 †G. P. Clinton, Sc. D., *Bot.*
 †Miss V. E. Cole, *Libr.*
 †I. W. Davis, B. S., *Asst. Ent.*
 †M. A. D'Esopo, Ph. B., *Asst. Chem.*
 †Miss E. L. Ferry, M. S., *Research Chem.*
 †W. O. Filley, *For. (State For.).*
 †D. F. Jones, M. S., *Plant Breeder.*
 †Florence A. McCormick, Ph. D., *Asst. Bot.*
 †C. B. Morison, B. S., *Asst. Chem.*

†A. E. Moss, M. F., *Asst. For. (Storrs).*
 †T. B. Osborne, Ph. D., D. Sc., *Chief Research Chem.*
 †W. C. Pelton, B. S., *Specialist in Veg. Gard.*
 †C. E. Shepard, *Asst. Chem.*
 †E. M. Stoddard, B. S., *Asst. Bot.*
 †J. P. Street,¹ M. S., *Chief Anal. Chem.*
 †B. H. Walden, B. Agr., *First Asst. Ent.*
 †M. P. Zappe, B. S., *Asst. Ent.*

¹ On leave.

DELAWARE.

Delaware College and the Agricultural Experiment Station, Newark.

*College faculty. †Station staff. ‡Extension staff.

*S. C. Mitchell, Ph. D., LL. D., *President.**††Harry Hayward, M. S. A., *Dean Agr. Dept. Dir. of Sta. Dir. Ext. Service. State Leader of County Agents. An. Husb. (*)*†D. C. Dyer, Ph. D., *Chem.**†R. W. Goss, M. S., (*Asst.*) *Plant Path.; Asst. Plant Path.**†A. E. Grantham, B. S. A., *Agron.**G. A. Harter, Ph. D., *Phys.**†F. A. Hays, Ph. D., (*Asst.*) *An. Husb.; Asst. An. Husb.**C. O. Houghton, B. A., *Biol.*†Elizabeth Jefferson, B. S., *Home Econ. Ext.*†H. T. King, B. S., *Asst. Chem.*†E. M. R. Lamkey, Ph. D., *Plant Physiol.*†Phyllis Lapham, S. B., *Research Asst. in An. Husb.**†C. A. McCue, B. S., *Hort.**†T. F. Manns, Ph. D., *Soil Bact., Plant Path.*†T. T. Martin, *Boys' and Girls' Club Leader.**R. V. Mitchell, B. S., *Poultry Husb.*†C. E. Neff, M. A., *Asst. Agron.**M. L. Nichols, B. S., (*Asst.*) *Agron.**R. R. Pailthorp, B. S., (*Asst.*) *Hort.**†C. C. Palmer, D. V. M., M. S., *Bact., Physiol., Hyg.; Vet.*†M. O. Pence, B. S., *Asst. State Leader of County Agts.**C. L. Penny, Sc. D., *Agr. Chem., Geol.**Firman Thompson, B. S., *Agr. Chem.*†Helen Updegraff, M. A., *Research Asst. in Chem.*†W. J. Young, M. S., *Asst. Hort.*

State College for Colored Students, Dover.

*College faculty.

*W. C. Jason, A. M., D. D., *President.**W. M. Henry, M. D., *Phys., Chem.**F. L. D. Parker, B. S., *Supt. of Agr. Dept.**Gertrude Patterson, *Dom. Sci. and Art*

FLORIDA.

College of Agriculture and the Agricultural Experiment Station of the University of Florida, Gainesville.

*College faculty. †Station staff. ‡Extension staff.

*A. A. Murphree, LL. D., *President of University.**††P. H. Rolfs, M. S., *Dean Coll. of Agr. Dir. of Sta. Dir. Ext. Div.*††S. E. Collison, M. S., *Chem.**H. S. Davis, Ph. D., *Zool., Bact.*††B. F. Floyd, A. M., *Plant Physiol.**W. L. Floyd, M. S., *Bot., Hort. Asst. Dean Coll. of Agr.*†K. H. Graham, *Auditor.**M. B. Hadley, A. B., *Libr.*†G. L. Herrington, B. S., *Boys' Corn Clubs.*†S. W. Hiatt, *Farm Dem. Work (West Florida).*†E. W. Jenkins, *Farm Dem. Work (North Florida).*†H. S. McLendon, *Farm Dem. Work (South Florida).*†C. K. McQuarrie, *State Agt. Farm. Dem. Work. Supt. Farmers' Insts.*†Julius Matz, B. S., *Lab. Asst. in Plant Path.*†Mildred Nothnagel, Ph. D., *Asst. Plant Physiol.**F. M. Rast, jr., M. S., (*Asst.*) *Soils and Ferts.*††J. M. Scott, B. S., *An. Indus., Vice Dir.*††C. D. Sherbakoff, Ph. D., *Assoc. Plant Path.*†A. M. Smith, B. S., *Asst. Chem.*†A. P. Spencer, M. S., *Asst. Dir. Ext. Div.*††H. E. Stevens, M. S., *Plant Path.*†J. B. Thompson, B. S., *Ext. Specialist in Hort.**†J. E. Turlington, Ph. D., *Agron.*†T. Van Hyning, *Libr.*††J. R. Watson, M. A., *Ent.**†O. W. Weaver, B. S., *Instr. Journalism and Corresp. Courses; Agr. Editor.**†C. L. Willoughby, B. Agr., *An. Husb., Dairying.*

Florida Agricultural and Mechanical College for Negroes, Tallahassee.

*College faculty. ‡Extension staff.

*N. B. Young, M. A., Litt. D., *President*.

- *L. W. Black, *Asst. in An. Husb.*
- *Celia A. Bradley, *Laundrying.*
- *B. F. Bullock, B. S., *Dir. Agr. Dept., Agr.*
- *Julia C. Colvin, *Libr.*
- *Helen G. Crampton, *Instr. Sewing.*
- *W. H. Crutcher, *Instr. Truck Gard., Farm Crops, Farm Supt.*
- *Evalina A. Davis, *Dir. Home Econ. Dept., Instr. Cooking.*
- *S. Lenora Hargraves, *Nurse Training.*

- *Jennie V. Hilyer, *Nurse Training.*
- *Leola Hudson, A. B., *Chem., Cooking.*
- *E. B. Jones, B. S., *Chem., Biol.*
- *Ellen O. Paige, *Instr. Dressmaking, Millinery.*
- *F. C. Robinson, *Farm Collaborator.*
- *D. A. Starks, *Instr. An. Husb.*
- ‡A. A. Turner, *Farmers' Club Organizer.*
- *B. L. Waites, A. M., *Phys.*
- *Lucy H. Ware, *Housekeeping.*

GEORGIA.**Georgia State College of Agriculture, University of Georgia, Athens.**

*College faculty. ‡Extension staff.

*A. M. Soule, Sc. D., F. R. S. A., LL. D., *President*.‡J. Phil. Campbell, B. S., *Dir. of Ext. Dept.*‡W. H. Allen, B. S., *Supervisor Poultry Clubs.**J. B. Berry, M. S., *For., Plant Path.*‡G. L. Bigford, B. S. A., *Asst. in An. Husb. (Coop. U. S. D. A.).**H. V. Black, Ph. D., (*Assoc.*) *Chem.*‡William Bradford, A. B., M. D., *Asst. State Supervisor Agr. Clubs.*‡H. L. Brown, B. S., *Asst. in An. Husb.**W. C. Burkhardt, D. V. M., (*Adjunct*) *Bact.**W. M. Burson, D. V. M., *Vet. Sci.**J. P. Campbell, Ph. D., *Biol.*‡L. M. Carter, B. S., (*Junior*) *Soil Chem.*‡R. R. Childs, M. S., *Asst. in Agron. (Coop. U. S. D. A.).*‡M. W. H. Collins, B. S. A., *Field Agt. in Agron.**W. O. Collins, B. S. A., *Instr. Soil Chem.**G. A. Crabb, B. S., (*Junior*) *Agron. in charge Soil Work.*‡G. V. Cunningham, *Asst. State Supervisor County Agts.**W. S. Dilts,¹ B. S., (*Adjunct*) *Poultry Husb.*‡Lois P. Dowdle, *Asst. State Supervisor Home Econ.*‡J. E. Downing, *Asst. State Supervisor Pig Clubs (Coop. U. S. D. A.).**J. R. Fain, B. S., *Agron.*‡G. W. Firor, M. S., *Supervisor Ext. Schools.*‡J. W. Firor, B. S., (*Junior*) *Hort.*‡M. C. Gay, B. S., *Field Agt. in Marketing.*‡J. K. Giles, B. S. A., *State Supervisor Agr. Clubs.**James Godkin, M. S., *Field Agt. in For. and Path.**O. T. Goodwin, B. S., (*Adjunct*) *Dairy Husb.*‡R. M. Gridley, B. S. A., *Field Agt. in An. Husb.*‡J. F. Hart, jr., B. S., *Gen. Field Agt.**L. C. Hart, E. E., *Agr. Engin.**L. L. Hendren, Ph. D., *Phys.**Horatio Hughes, Ph. D., *Instr. Chem.**M. P. Jarnagin, B. S. A., *An. Husb.*‡G. R. Jones, B. S. A., *Field Agt. in Agr. Engin.*‡C. N. Keyser, B. S., *Field Agt. in Hort.*‡D. D. Long, B. S., *Soil Expert in State Survey.*‡M. W. Lowry, M. A., (*Adjunct*) *Soil Chem.**T. H. McHatton,¹ D. Sc., *Hort.**H. T. Maddux, B. S. A., (*Junior*) *Journalism, Editor.**H. W. Odum, Ph. D., (*Assoc.*) *Rural Ed.*‡J. V. Phillips, C. E., *Senior Drainage Engin. (Coop. U. S. D. A.).*‡Elmo Ragsdale, B. S. A., *Field Agt. in Hort.**L. E. Rast, B. S. A., (*Junior*) *Agron. in charge Cotton Indus.**J. M. Reade, Ph. D., *Bot.**Nelle M. Reese, *Libr.**J. E. Severin, D. V. M., *Instr. Vet. Med.**‡S. H. Starr, B. S. A., (*Adjunct*) *Farm Mgt.**P. O. Vanatter, *Supt. Field Expts.**E. G. Welch, B. S. A. E., (*Adjunct*) *Agr. Engin.*‡E. C. Westbrook, B. S. A., *Field Agt. in Agron.**J. T. Wheeler, B. S., *Agr. Ed.**H. C. White, Ph. D., Sc. D., *Chem.**C. N. Wilder, B. S., *Tutor in Agr. Chem.*‡Mrs. Bessie S. Wood, *Asst. State Supervisor Home Econ.**W. A. Worsham, jr., A. M., *Agr. Chem.*¹ On leave.

Georgia Experiment Station, Experiment.¹

Department of Georgia State College of Agriculture at Athens.

†Station staff.

†J. D. Price, *Director*.†R. W. Allen, M. S., *Asst. Chem.*†B. B. Higgins,² Ph. D., *Bot., Plant Path.*†C. K. McClelland, M. S. A., *Agron.*†F. H. Smith,² B. S., *Chem.*†H. P. Stuckey, B. S., *Hort.*†J. C. Temple, M. S., *Bact.***Georgia State Industrial College for Colored Youths, University of Georgia, Savannah.**

*College faculty. ‡Extension staff.

*R. R. Wright, A. M., LL. D., *President*.*J. S. Frazier, *Instr. Dairying.**Mrs. W. G. Hill, *Instr. Dom. Sci.**Howard Jackson, *Instr. Laundering.**M. J. Smitherman, *Instr. Poultry Husb.**R. H. Thomas, *Farm Supt.**W. D. Thomas, A. M., M. D., *Instr. Nat. Sci.**Mrs. W. P. White, *Instr. Sewing, Dress making.*‡E. A. Williams, *Farm Dem.***GUAM.****Agricultural Experiment Station, Guam, Island of Guam.**Under the supervision of the Office of Experiment Stations, States Relations Service,
United States Department of Agriculture.

†Station staff.

†C. W. Edwards, B. S., *Animal Husbandman in charge.*†Glen Briggs, B. S., *Agron.*‡Peter Nelson, *Assistant.***HAWAII.****College of Hawaii, Honolulu.**

*College faculty.

*A. L. Dean, Ph. D., *President. Chemistry.**Elizabeth L. Bryan, Sc. D., *Libr.**W. A. Bryan, B. S., *Zool.**Minnie E. Chipman, *Ceramics and Design, (Dom. Arts).**Mildred G. Cowdrey, A. B., *Asst. in Chem.**D. L. Crawford, M. A., *Ent.**Anna von B. Dahl, *Instr. Textiles.**F. T. Dillingham, M. A., *Chem.**Alice E. Harbaugh, *Asst. in Ceramics.**L. A. Henke, B. S., *Agr.**Vaughan MacCaughy, B. S. A., *Bot.**Elizabeth Matthews, M. A., *Dom. Sci.**J. F. C. Rock, *Bot.**Arnold Romberg, Ph. D., *Phys.**H. S. Walker, A. B., *Sugar Tech.**H. J. Wentzel, B. S., *Instr. Agr., Instr. and Head of Dairy Dept.***Agricultural Experiment Station, Honolulu.**Under the supervision of the Office of Experiment Stations, States Relations Service,
United States Department of Agriculture.

†Station staff. ‡Extension staff.

†J. M. Westgate, M. S., *Agronomist in charge.*†F. G. Krauss, *Supt. Ext. Work (Hauku).*†C. W. Carpenter, M. S., *Plant Path.*†K. A. Ching, B. S., *Asst. Chem.*†J. H. Cowan, *Asst. in Hort.*†R. A. Goff, B. S., *in charge Glenwood Substa.*†J. E. Higgins, M. S. A., *Hort.*†M. O. Johnson, M. S., *Chem.*†C. A. Sahr, *Asst. Agron.*¹ Telegraph and express address, *Griffin*.² On leave.

Hawaiian Sugar Planters' Experiment Station, Honolulu.

†Station staff.

†H. P. Agee, B. S., *Director*.

†W. P. Alexander, Ph. B., *Asst. Agr.*
 †R. M. Allen, B. S., *Asst. Agr.*
 †A. Brodie, M. A. S., *Asst. Chem.*
 †P. S. Burgess, M. S., *Chem.*
 †E. L. Caum, B. A., *Asst. Path.*
 †R. E. Doty, B. S., *Asst. Agr.*
 †George Hutchinson, B. S., *Asst. Chem.*
 †Y. Kutsunal, B. S., *Asst. Agr.*
 †L. T. Lyman, B. S., *Asst. Agr.*
 †H. L. Lyon, Ph. D., *Path.*
 †W. R. McAlle, *Asst. Sugar Tech.*
 †J. T. Molr, jr., B. S., *Asst. Agr.*

†F. Muir, *Ent.*
 †R. S. Norris, Ph. D., *Sugar Tech.*
 †W. R. R. Potter, P. E., *Illustrator.*
 †J. S. B. Pratt, jr., B. S., *Asst. Agr.*
 †J. M. Reynolds, *Asst. Chem.*
 †O. H. Swezey, M. S., *Ent.*
 †R. S. Thurston, B. S., *First Asst. Agr.*
 †P. H. Timberlake, A. M., *Asst. Ent.*
 †J. A. Verret, B. S., *Assoc. Agr.*
 †F. R. Werthmueller, B. S., *Asst. Chem.*
 †F. X. Williams, Sc. D., *Asst. Ent.*

IDAHO.**College of Agriculture and the Agricultural Experiment Station of the University of Idaho, Moscow.**

*College faculty. †Station staff. ‡Extension staff.

*E. H. Lindley, Ph. D., *President of University.*
 *†E. J. Iddings, B. S., *Dean Coll. of Agr. An. Husb. (*†)*
 *†J. S. Jones, M. S. A., *Dir. of Sta. Agr. Chem. (*†)*
 †L. W. Fluharty, B. S., *Dir. of Ext. Service (Boise).*

†L. C. Alcher, B. S., *Supt. Aberdeen Substa. (Coop. U. S. D. A.)*
 †E. R. Bennett, M. H., *Ext. Hort. (Boise).*
 *†A. C. Burrill, M. S., (*Asst.*) *Ent.; Ent.*
 †C. W. Colver,¹ M. S., *Asst. Chem.*
 *†G. J. Downing, B. S., *Instr. Hort.; Asst. Hort.*
 *†W. C. Edmundson, M. S., *Instr. Hort.; Asst. Hort.*
 †C. M. Eklof, B. S., *Supt. Caldwell Substa.*
 *†H. P. Fishburn, M. A., (*Assoc.*) *Agr. Chem.; Asst. Chem.*
 †Zelma F. Fowler, *Asst. State Leader of Boys' and Girls' Clubs (Boise).*
 *F. W. Gail, M. A., (*Assoc.*) *Bot.; Actg. Head of Dept.*
 *†E. F. Goss, M. S., (*Asst.*) *Dairying; Dairyman.*
 *†C. W. Hickman, B. S., (*Assoc.*) *An. Husb.; Assoc. An. Husb.*
 †T. L. Hills, Ph. D., *Research soil Bact.*
 *†E. B. Hitchcock, M. S., *Instr. Soils; Asst. Soil Tech.*
 †H. W. Hochbaum, B. S. A., *State Leader of County Agts. (Boise).*
 *Jessie M. Hoover, B. S., *Home Econ.*
 *†H. W. Hulbert, B. S., *Instr. Farm Crops; Asst. in Farm Crops.*
 *Hallie Hyde,¹ B. S., *Instr. Home Econ.*
 *O. L. Inman, M. S., *Instr. Bot.*
 †Amy Kelly, B. S., *Lect. in Home Econ. (Boise).*
 *J. A. Kostalek, Ph. D., (*Assoc.*) *Chem.*

†F. H. Lafrenz, B. S., *Supt. Sandpoint Substa.*
 *Cora I. Leiby, B. S., *Instr. Home Econ.*
 *H. C. Luce, D. V. M., *Instr. Vet. Sci.*
 †W. T. McCall, B. S., *State Leader of Boys' and Girls' Clubs (Boise).*
 *Esther McGinnis, B. S., *Instr. Home Econ.*
 *†F. G. Miller, M. F., *For.*
 *†Prentice Moore, *Instr. Poultry Husb.; Poultryman.*
 †R. E. Neidig, M. S., Ph. C., *Chem. (Feeds and An. Nutr.).*
 *J. E. Nordby, M. S., *Instr. An. Husb., Farm Supt.*
 *†P. P. Peterson, Ph. D., *Soils; Soil Tech.*
 *E. W. Prichard, B. S., *Instr. Dairying.*
 *†J. J. Putnam, Ph. D., *Bact.; Asst. Bact.*
 *†G. S. Ray, B. S., (*Asst.*) *Farm Crops; Farm Crops.*
 †C. V. Schrack, B. S., *Gardener.*
 *†Mary B. Sweet, B. L. S., *Instr. Libr. Sci., Libr.*
 *†C. C. Vincent, M. S. A., *Hort.*
 *†C. L. von Ende, Ph. D., *Chem.; Assoc. Chem.*
 *†Mina A. Willis, M. S., *Instr. Plant Path.; Plant Path.*
 *C. B. Wilson, A. M., (*Asst.*) *Agr. Ed. and Prin. School of Pract. Agr.*
 *J. E. Wodsdalek, Ph. D., *Zool. and Ent.*
 *J. C. Wooley, B. S., *Agr. Engin.*

¹ On leave.

ILLINOIS.

College of Agriculture and the Agricultural Experiment Station of the University of Illinois, Urbana.

*College faculty. †Station staff. ‡Extension staff.

- *E. J. James, Ph. D., LL. D., *President of University.*
 *†‡Eugene Davenport, M. Agr., LL. D., *Dean Coll. of Agr. Dir. of Sta. Dir. Agr. Ext. Service. Thrcmmatology. (*)*
 *†W. F. Handschin, B. S., *Vice Dir. Ext. Service. (Asst.) Farm Organization and Mgt. (*) Asst. Chief Farm Organization and Mgt. (†)*
 *†P. W. Allen, M. S., *Assoc. Dairy Bact.*
 *Josephine K. Allison, M. S., *Asst. in Household Sci.*
 *†W. A. Allison, M. S., *Asst. in An. Husb.*
 *†H. W. Anderson, Ph. D., *Assoc. Pomol.*
 *Viola J. Anderson, M. S., *Instr. Household Sci.*
 *†J. B. Andrews, B. S., *Instr. Farm Organization and Mgt.; First Asst. in Farm Organization and Mgt.*
 *†E. K. Augustus, B. S., *Instr. An. Husb.; First Asst. An. Husb.*
 *†E. W. Bailey, M. S., *(Asst.) Pomol.; Asst. Chief Plant Brdg.*
 *†D. O. Barto, B. S., *Assoc. An. Husb.*
 *†F. C. Bauer, B. S., *Assoc. Soil Fert.*
 *†Isabel Bevier, Ph. M., *Household Sci. Dir. Household Sci. Courses. Vice Dir. Ext. Work in Home Econ.*
 †J. D. Bilsborrow, B. S., *Asst. State Leader of County Agts.*
 *†J. C. Blair, M. S. A., *Hort.; Chief Hort.*
 *†S. J. Bole, A. M., *Assoc. Pomol.*
 †J. D. Brew, B. S., *Assoc. Dairy Bact.*
 *†W. S. Brock, B. S., *Instr. Pomol.; First Asst. Pomol.*
 *†W. I. Brockson, M. S., *Asst. Crop Prod.*
 †Fannie M. Brooks, A. B., *Instr. Home Econ. Dem.*
 *†H. D. Brown, M. S., *Instr. Oler.; First Asst. Oler.*
 †A. M. Brunson, B. S., *First Asst. Plant Brdg.*
 *†Sleeter Bull, M. S., *Assoc. An. Nutr.*
 †Mamie Bunch, B. S., *State Leader Home Econ. Dem., in charge of Household Sci. Ext.*
 *†W. L. Burlison, Ph. D., *(Assoc.) Crop Prod.; Assoc. Chief Crop Prod.*
 *†W. J. Carmichael,¹ M. S., *Assoc. An. Husb.*
 †H. C. M. Case, B. S., *Asst. State Leader of County Agts., Assoc. in Farm Organization and Mgt.*
 *J. H. Checkley, B. S., *Assoc. in Agr. Coll. Ext.*
 †H. M. Chiles, B. S., *Asst. in An. Nutr.*
 *Florence H. Churton, B. S., *Instr. Household Sci.*
 †E. M. Clark, B. S., *First Asst. Dairy Prod.*
 †G. N. Coffey, Ph. D., *State Leader of County Agts.*
 *†W. C. Coffey, M. S., *Sheep Husb.; Chief Sheep Husb.*
 *A. S. Colby, M. S., *Instr. Pomol.*
 *†C. S. Crandall, M. S., *Pomol.; Chief Plant Brdg.*
 *†H. W. Day, B. S., *Asst. in Oler.*
 *Mary C. de Garmo, M. A., *Instr. Household Sci.*
 *†J. A. Detlefsen, Sc. D., *(Asst.) Genetics; Asst. Chief Genetics.*
 †R. W. Dickenson,¹ B. S., *First Asst. in Soil Phys.*
 *†H. B. Dorner, M. S., *(Asst.) Flor.; Asst. Chief Flor.*
 *†G. H. Dungan, B. S., *Asst. in Crop Prod.*
 *†H. C. Eckstein, A. B., *Asst. in An. Nutr.*
 *†J. L. Edmonds, B. S., *(Asst.) Horse Husb.; Asst. Chief Horse Husb.*
 †O. I. Ellis, B. S., *First Asst. in Soil Phys.*
 *†D. T. Englis, Ph. D., *Assoc. Flor. Chem.*
 *F. N. Evans, M. L. A. *(Asst.) Landsc. Gard.*
 †H. F. T. Fahrnkopf, B. S., *First Asst. in Soil Fert.*
 *†F. A. Fisher, B. S., *Assoc. Soil Phys.*
 *Georgia E. Fleming, B. S., *Instr. Textiles.*
 *Edna Flexer, *Asst. in Household Sci.*
 *W. J. Fraser, M. S., *Dairy Farming.*
 †F. W. Garrett, B. S., *Assoc. in Soil Fert.*
 †G. E. Gentle, B. S., *First Asst. in Soil Phys.*
 *†W. B. Gernert, Ph. D., *(Asst.) Farm Crops.*
 *†H. C. Gilkerson, B. S., *Instr. Soil Fert.; First Asst. in Soil Fert.*
 †E. E. Glick, B. S., *Asst. in Soil Fert.*
 *†Robert Graham, B. S., D. V. M., *An. Path.; Chief An. Path.*
 *Cora E. Gray, M. S., *Assoc. Household Sci.*
 *†Anne I. Green, B. S., *Instr. Home Econ. Ext.*
 †J. H. Greene, M. S., *State Leader Junior Ext.*

¹ On leave.

- *†H. S. Grindley, Sc. D., *An. Nutr.*; *Chief An. Nutr.*
 *†A. J. Gunderson, B. S., *Assoc. Pomol.*
 *Gilbert Gusler, B. S., *Assoc. An. Husb.*
 *†A. F. Gustafson, M. S., (*Asst.*) *Soil Phys.*; *Asst. Chief in Soil Phys.*
 *†S. W. Hall, B. S., *Asst. in Flor.*
 *†Roy Hansen, B. S., *Instr. Soil Biol.*; *First Asst. Soil Biol.*
 *†H. A. Harding, Ph. D., *Dairy Bact.*; *Chief Dairy Bact.*
 *†N. W. Hepburn, M. S., (*Asst.*) *Dairy Mfrs.*; *Asst. Chief Dairy Mfrs.*
 *R. E. Hieronymus, LL. D., *Community Adviser.*
 †H. C. Hildebolt,¹ B. S., *Asst. in Soil Fert.*
 *Leona Hope, *Assoc. Household Sci.*
 *†C. G. Hopkins, Ph. D., *Agron.*; *Vice Dir. Sta. Chief Agron. and Chem.*
 †C. T. Hufford, B. S., *Asst. in Soil Phys.*
 †James Hutchinson, *Asst. Flor.*
 *M. E. Jahr, B. S., *Assoc. Farm Mech.*
 *†W. P. James, *Asst. in Pomol.*
 *A. W. Jamison, M. S., *Asst. Supt. Agr. Coll. Ext.*
 *†W. G. Kammlade,¹ M. S., *Asst. An. Husb.*
 †Mary H. Keith, A. M., *Asst. in An. Nutr.*
 *†E. G. Lauterbach, M. S., *Asst. Flor.*
 *†P. A. Lehenbauer, Ph. D., *Assoc. Plant Physiol. and Path.*
 †W. R. Leighty, B. S., *First Asst. Soil Anal.*
 *†J. W. Lloyd, Ph. D., *Oler.*; *Chief Oler.*
 *†H. H. Mitchell, Ph. D., *Assoc. An. Nutr.*
 *†J. G. Mosier, B. S., *Soil Phys.*; *Chief Soil Phys.*
 *†H. W. Mumford, B. S., *An. Husb.*; *Chief An. Husb.*
 †Naomi Newburn, A. B., *Instr. Home Econ. Ext.*
 *A. W. Nolan, M. S., (*Asst.*) *Agr. Ext.*
 *C. B. Olney, B. S., D. V. M., *Asst. An. Path.*
 *†O. R. Overman, Ph. D., *Assoc. Dairy Chem.*
 *Maud E. Parsons, A. B., *Assoc. Household Sci.*; *Dir. Lunch Room.*
 †F. A. Pearson, B. S., *Assoc. Dairy Husb.*
 †Olive B. Percival, B. S., *Asst. in Home Econ. Dem.*
 *Lorinda Perry, Ph. D., *Assoc. Household Sci.*
 *†B. S. Pickett, M. S., (*Asst.*) *Pomol.*; *Asst. Chief Pomol.*
 *†John Pieper, M. S., *Asst. in Crop Prod.*
 *†M. J. Prucha, Ph. D., (*Asst.*) *Dairy Bact.*; *Asst. Chief Dairy Bact.*
 *F. H. Rankin, B. S., *Supt. Agr. Coll. Ext.*, *Asst. to Dean.*
 *††C. S. Rhode, B. S., *Asst. Dairy Husb.*
 *†J. B. Rice, B. S., *Asst. An. Husb.*

- †H. L. Rietz, Ph. D., *Statistician.*
 *†Elmer Roberts, Ph. D., *Instr. Genetics*; *First Asst. in Genetics.*
 *C. M. Robinson, M. A., *Civic Design.*
 *R. R. Root, M. L. A., (*Asst.*) *Landsc. Gard.*
 †H. A. Ross, B. S., *Asst. in Dairy Econ.*
 †W. Rudolfs, A. I., *Asst. in Soil Anal.*
 *†H. A. Ruehe, M. S., *Assoc. Dairy Mfrs.*
 †H. K. Rullson,¹ B. S., *Asst. Dairy Husb.*
 *†H. P. Rusk, M. S. A., (*Asst.*) *Cattle Husb.*; *Asst. Chief Cattle Husb.*
 *†W. A. Ruth, A. M., *Assoc. in Hort. Chem.*
 †W. H. Sachs, M. A., *Assoc. Soil Anal.*
 †J. L. St. John, M. S., *Asst. in Soil Anal.*
 *R. I. Shawl, B. S., *Asst. in Farm Mech.*
 *†L. H. Smith, Ph. D., *Plant Brdg.*; *Chief Plant Brdg.*
 *††W. H. Smith, M. S., *Assoc. An. Husb.*
 *†H. J. Snider, B. S., *Instr. Soil Fert.*; *First Asst. in Soil Fert.*
 †H. R. Stanford, B. S., *First Asst. Plant Brdg.*
 *†Robert Stewart, Ph. D., (*Assoc.*) *Soil Fert.*; *Assoc. Chief in Soil Fert.*
 *Sarah A. Sutherland, B. S., *Instr. Household Sci.*
 *†L. E. Thorne,¹ B. S., *Asst. in Agr. Statistics and Genetics.*
 *†E. F. Torgerson, B. S., *Instr. Soil Phys.*; *First Asst. in Soil Phys.*
 *†L. J. True, B. S., *Instr. Dairy Mfrs.*; *First Asst. in Dairy Mfrs.*
 †Frank Turner,¹ B. S., *First Asst. Dairy Husb.*
 *†H. F. Tuttle, M. S., *Instr. Soil Phys.*; *First Asst. Soil Phys.*
 †Ernest Van Alstine, M. S., *Asst. Chief Soils Lab.*
 *†E. H. Walworth, M. S., *Instr. Crop Prod.*; *First Asst. Crop Prod.*
 †F. M. W. Wascher, B. S., *Assoc. Soil Phys.*
 †H. C. Wheeler, B. S., *Assoc. Soil Phys.*
 *Lucile Wheeler, A. M., *Assoc. Household Sci.*
 *Ruth Wheeler, Ph. D., (*Asst.*) *Household Sci.*
 *†J. W. Whisenand, M. S., *Instr. An. Husb.*; *First Asst. An. Husb.*
 †J. E. Whitechurch, B. S., *Assoc. in Soil Fert.*
 *E. A. White, Ph. D., (*Asst.*) *Farm Mech.*
 *†A. L. Whiting, Ph. D., (*Asst.*) *Soil Biol.*; *Asst. Chief Soil Biol.*
 *†R. H. Wilcox, B. S., *Assoc. An. Husb.*
 *†Mabel Wilkerson, Ph. B., *Asst. in Home Econ. Ext.*
 *†F. A. Wyatt, Ph. D., *Assoc. Soil Fert.*
 *W. W. Yapp, M. S., *Instr. Dairy Husb.*

¹ On leave.

INDIANA.

Purdue University (the School of Agriculture, the Agricultural Experiment Station, and the Departments of Home Economics and Agricultural Extension), La Fayette.

*College faculty. †Station staff. ‡Extension staff.

*W. E. Stone, Ph. D., LL. D., *President of University.*

*†J. H. Skinner, B. S., *Dean School of Agr. An. Husb. (*) ; Chief An. Husb. (†)*

†G. G. Woodbury, M. S., *Dir. of Sta.*

†‡G. I. Christie, B. S. A., *Supt. Agr. Ext. State Leader.*

*William Aitkenhead, M. E., M. A., (*Assoc.*) *Farm Mech.*

†J. M. Aldrich, Ph. D., *Ent. Asst. (Detailed by U. S. D. A.).*

*H. E. Allen, B. S., (*Assoc.*) *An. Husb.*

†I. Evelyn Allison, B. S., *Asst. Bot.*

*O. G. Anderson, B. S., (*Asst.*) *Pomol.*

†S. L. Anderson, B. S. A., *Creamery Insp.*

*J. C. Arthur, D. Sc., *Bot. Emeritus.*

†P. R. Bauman, B. S., *Insp. State Chem. Dept.*

‡C. Miriam Beall, B. S., *Asst. in Home Econ. Ext.*

*F. C. Beall, B. S. A., *Instr. An. Husb.*

‡J. C. Beavers, B. S. A., *Assoc. in Soils and Crops Ext.*

*C. A. Behrens, Ph. D., (*Assoc.*) *Bact.*

†R. O. Bitler, B. S., *Deputy State Chem.*

†T. H. Broughton, B. S., *Creamery Insp.*

‡C. L. Burkholder, B. S., *Asst. in Hort. Ext.*

†H. D. Burnside, B. S., *Insp. State Chem. Dept.*

*A. L. Bushey, M. S., *Instr. Agr. Chem.*

*†R. E. Caldwell, B. S., *Dairy Husb. in charge of Dept.; Actg. Chief in Dairy Husb.*

*R. H. Carr, Ph. D., (*Asst.*) *Agr. Chem.*

†G. C. Carter, B. S., *Insp. State Chem. Dept.*

†D. B. Clark, D. C. M., *Assoc. Vet.*

†C. H. Clink, B. S., *Asst. in Serum Prod.*

†‡T. A. Coleman, *Asst. State Leader in Field Studies and Dem. Work.*

†S. D. Conner, M. S., *Assoc. Chem. in Soils and Crops.*

*Stanley Coulter, Ph. D., LL. D., *Biol.*

*†R. A. Craig, D. V. M., *Vet. Sci.; Chief Vet.*

†C. O. Cromer, B. S., *Assoc. in Crops.*

*F. P. Cullinan, B. S., *Instr. Pomol.*

*C. C. Cunningham, B. S. C. E., *Instr. Farm Mech.*

*Juanita Darrach, A. M., *Instr. Home Econ.*

†J. J. Davis, B. S., *Ent. Asst. (Detailed by U. S. D. A.).*

†R. B. Deemer, B. S., *Deputy State Chem.*

†L. P. Doyle, B. S. A., *Asst. in An. Path.*

*H. E. Enders, Ph. D., *Zool.*

†W. F. Epple, Ph. G., Ph. C., *Asst. Dairy Chem.*

*P. N. Evans, Ph. D., *Chem.*

*E. S. Ferry, R. S., *Phys.*

*†M. L. Fisher, M. S., *Agron. in charge of Dept.; Asst. Chief in Soils and Crops.*

†W. Q. Fitch, B. S., *Asst. in Agr. Ext.*

†O. W. Ford, A. B., *Deputy State Chem.*

†G. M. Frier, B. S., *Assoc. in charge Short Courses and Exhibits.*

‡Lella R. Gaddis, *Home Dem. Agt.*

*Mary E. Gamble, M. A., *Instr. Home Econ.*

‡Alma L. Garvin, B. S., *Asst. in Home Econ. Ext.*

‡F. C. Gaylord, B. S., *Asst. in Hort. Ext.*

‡C. R. George, B. S. A., *Assoc. in Dairy Husb. Ext.*

†L. R. George, B. S., *Asst. An. Path.*

*C. F. Gobble, B. S., (*Asst.*) *An. Husb.*

*†Laurenz Greene, M. S. A., *Hort.; Chief in Hort.*

†H. W. Gregory, B. S., *Assoc. in Dairy Mfrs.*

‡Mabel L. Harlan, *Asst. in Agr. Ext.*

‡Claude Harper, B. S., *Asst. in An. Husb. Ext.*

†T. W. Harvey, B. S., *Asst. State Leader of County Agts.*

‡Clarence Henry, B. S., *Asst. State Leader of County Agts.*

*W. M. Hepburn, M. A., B. L. S., *Libr.*

†G. N. Hoffer, M. S., *Assoc. in Bot.*

*Amy Howe, Ph. B., *Instr. Home Econ*

†W. A. Huelsen, B. S., *Asst. in Hort.*

†H. S. Jackson, A. B., *Chief in Bot.*

†L. L. Jones, B. S., *Assoc. in Poultry Husb. Ext.*

†S. C. Jones, M. S., *Assoc. in Soils.*

*†D. C. Kennard, B. S. A., *Instr. Poultry Husb.; Asst. Poultry Husb.*

†‡L. C. Kigin, D. V. M., *Assoc. Vet., Asst. Ext. Vet.*

†C. D. Kinsman, M. S. A., *Asst. in Rural Engin.*

†W. B. Krueck, B. S., *Asst. in Boys' and Girls' Club Work.*

*R. A. Lamson, B. S., *Instr. Dairying.*

†W. H. Larrimer, B. S., *Sci. Asst. (Detailed U. S. D. A.).*

*†W. C. Latta, M. S., *Agr., Specialist in charge Farmers' Insts.*

*F. C. Lewis, B. S., *Instr. Farm. Mech.*

*W. E. Lommel, B. S. A., (*Asst.*) *Hort.*

†Anna M. Lute, M. S., *Sci. Asst. (Detailed U. S. D. A.).*

†H. E. McCartney, B. S. A., *Asst. An. Husb. Ext.*

†J. A. McCarty, B. S. A., *Asst. in Soils and Crops.*

- †E. B. Mains, Ph. D., *Assoc. Bot.*
 *C. R. Mason, B. S., *Instr. Hort.*
 *†P. W. Mason, M. S., (*Asst.*) *Ent.*; *Asst. Ent.*
 †Shirley L. Mason, A. B., *Sci. Asst.* (*Detailed U. S. D. A.*).
 *Mary L. Matthews, B. S., *Home Econ.*
 †W. O. Mills, B. S., *Asst. in Dairy Husb. Ext.*
 †H. J. Nimitz, B. S., *Deputy State Chem.*
 †H. A. Noyes, M. S., *Assoc. Hort. Chem.*
 †F. I. Odell, *Mgr. Moses Fell Farms (Bedford)*.
 †Joseph Oskamp, B. S., *Assoc. Pomol.*
 *Laura Partch, B. S., *Instr. Home Econ.*
 †Edith Patt, *Asst. in Seed Lab.*
 *E. J. Petry, M. S., (*Asst.*) *Agr. Bot.*
 *†A. G. Phillips, B. S., *Poultry Husb.*; *Chief in Poultry Husb.*
 †F. J. Pipal, A. M., *Assoc. in Bot. Ext.*
 *Burr Prentice, M. F., (*Asst.*) *For.*
 *W. A. Price, M. S. A., (*Asst.*) *Ent.*
 †E. G. Proulx, M. S., *Acting State Chem.*
 *J. H. Ransom, Ph. D., *Gen. Chem.*
 †H. J. Reed, *Asst. to Dir. of Sta.*
 †P. S. Richey, B. S., *Asst. in An. Husb. Ext.*
 †D. A. Ricker, B. S., *Sci. Asst.* (*Detailed U. S. D. A.*).
 *F. E. Robbins, M. S., (*Asst.*) *Crop Prod.*
 †O. S. Roberts, B. S., *Chief Insp. State Chem. Dept.*
 †L. S. Robertson, B. S., *State Leader Farm Mgt. Dem.*
 †J. H. Roop, B. S., *Deputy State Chem.*
 *Mary Rose, B. S., *Instr. Home Econ.*
 †H. R. Rosen, M. S., *Asst. in Rust Work.*
 *Nellie F. Rowe, B. S., *Asst. in Home Econ.*
 †J. W. Schwab, B. S., *Asst. in An. Husb. Ext.*

- *†L. H. Schwartz, B. S., *Instr. Poultry Husb.*; *Asst. Poultry Husb.*
 *W. R. M. Scott, B. S., *Asst. in Farm Crops.*
 *O. H. Sears, M. S., *Instr. Soils.*
 †F. M. Shanklin, A. M., *State Pig Club Agt.*
 *J. A. Slipher, B. S., (*Asst.*) *Soils.*
 *G. M. Smith, B. S., *Instr. Hort.*
 *Nina B. Smith, B. S., *Instr. Home Econ.*
 *W. W. Smith, M. S., (*Assoc.*) *An. Husb.*
 †Z. M. Smith, A. M., *State Leader in Boys' and Girls Club Work.*
 †George Spitzer, Ph. G., B. S., *Assoc. Dairy Chem.*
 †C. G. Starr, B. S., *Actg. Assoc. in An. Husb.*
 *R. S. Stephenson, M. S., *Instr. An. Husb.*
 †H. G. Stevens, B. S., *Asst. in Dairy Husb. Ext.*
 †Wm. E. Stone, B. S., *Asst. in Farm Mgt. Dem.*
 †W. W. Sylvester, B. S., *Asst. Farm Mgt. Dem.*
 †R. S. Thomas, B. S., *Asst. in Short Courses and Exhibits.*
 †S. F. Thornton, B. S., *Deputy State Chem.*
 *E. H. Toole, A. M., (*Asst.*) *Plant Path., Physiol.*
 *†James Troop, M. S., *Ent.*; *Chief Ent.*
 †C. F. Turner, B. S., *Sci. Asst.* (*Detailed U. S. D. A.*).
 †F. L. Walkey, D. V. M., *Asst. Vet.*
 *R. E. Wallace, B. S., (*Assoc.*) *Soils.*
 *†H. M. Weeter, M. S., (*Asst.*) *Dairy Bact.*; *Assoc. Dairy Bact.*
 *†R. A. Whiting, D. V. M., *Instr. Vet. Sci.*; *Assoc. An. Path.*
 *†A. T. Wiancko, B. S., *Agron.*; *Chief in Soils and Crops.*
 *E. J. Wilford, B. S., *Instr. An. Husb.*

IOWA.

Iowa State College of Agriculture and Mechanic Arts and the Agricultural Experiment Station, Ames.

*College faculty. †Station staff. ‡Extension staff.

- *R. A. Pearson, M. S., LL. D., D. Agr., *President.*
 *†C. F. Curtiss, D. Sc., *Dean Div. of Agr. Dir. of Sta.*
 †R. K. Bliss, B. S., *Dir. of Agr. Ext.*

- *E. C. Ainsworth, B. S., *Instr. Dairying.*
 †E. W. Atkins, B. S., *Asst. in Apiculture.*
 †D. E. Bailey, M. S., *Asst. Chief in Dairying.*
 *Hazel Baker, B. S., *Instr. Dom. Art.*
 *A. L. Bakke, Ph. D., (*Assoc.*) *Plant Physiol.*
 *F. M. Baldwin, Ph. D., (*Asst.*) *Zool.*
 *R. L. Bancroft, M. S., (*Assoc.*) *Soils.*
 *R. S. Banks, M. S., *Asst. in Chem.*
 †Etta M. Bardwell, B. S., *Asst. State Club Leader.*

- ‡Nell M. Barnett, B. S., (*Ext. Asst.*) *Home Econ.*
 *†S. A. Beach, M. S., *Hort.*, *Vice Dean Div. of Agr.*; *Chief Hort.*, *For.*
 *††F. W. Beckman, Ph. B., *Agr. Journalism*; *Bul. Editor.*
 *H. E. Bemis, D. V. M., *Vet. Surg.*, *Vice Dean Div. Vet. Med.*
 †Mabel C. Bentley, B. S., (*Ext. Assoc.*) *Home Econ.*
 †Rex Beresford, B. S., (*Ext. Assoc.*) *An. Husb.*

- *H. D. Bergman, D. V. M., *Vet. Physiol.*
 †R. W. Berry, B. S., *Asst. State Club Leader.*
 *L. J. Bircher, M. A., *Instr. Chem.*
 †J. F. Bisig, B. S., *Asst. in Field Expts.*
 †E. C. Bishop, M. A., *State Club Leader.*
 *†H. A. Bittenbender, B. S., *Poultry Husb.; Chief Poultry Husb.*
 *A. W. Blizzard, M. A., *Asst. in Zool.*
 *R. R. Bolton, D. V. M., (Asst.) *Vet. Med.*
 *Alma B. Booth, *Instr. Dom. Art.*
 *Iva L. Brandt, B. S., (Assoc.) *Dom. Art.*
 *†C. E. Brashear, B. S., *Asst. to Dean and Dir.*
 *R. E. Brewer, B. S., *Asst. in Chem.*
 *F. E. Brown, A. B., (Asst.) *Chem.*
 *†P. E. Brown, Ph. D., *Soil Bact.; Chief Soil Chem. and Bact.*
 *J. J. Brunner, *Instr. Buttermaking.*
 †John Buchanan, B. S., *Supt. Coop. Expts.*
 *†R. E. Buchanan, Ph. D., *Bact., Hyg.; Dean Div. Indus. Sciences; Chief Bact.*
 †L. C. Burnett, M. S. A., *Chief Cercal Brdg. (Coop. U. S. D. A.).*
 *A. B. Caine, M. S. A., (Asst.) *An. Husb.*
 †Jessie Campbell, B. S., (Ext. Asst.) *Home Econ.*
 †Mrs. Louise H. Campbell, B. S., (Ext.) *Home Econ.*
 *D. G. Carter, B. S. A. E., *Instr. Agr. Engin.*
 *Janet G. Cation, B. S., *Instr. Home Econ.*
 *Ruth Cessna, M. A., *Asst. in Chem.*
 †F. G. Churchill, B. S., (Ext. Assoc.) *Farm Crops and Soils.*
 *Clarissa M. Clark, B. S., *Instr. Bact. and Hyg.*
 *†F. E. Colburn, (Assoc.) *Photog.; Photog.*
 *C. G. Cole, D. V. M., *in charge State Biol. Lab.*
 †Grace Conlon, B. S., *Ext. Instr. Home Econ.*
 *W. F. Coover, A. M., *Chem.*
 †G. E. Corson, M. S., *Asst. in Soil Survey.*
 †J. W. Coverdale, *County Agt. Leader.*
 *†F. H. Culley, M. L. A., (Assoc.) *Landsc. Arch.; Asst. Landsc. Arch.*
 *J. C. Cunningham, B. S., *Hort., Bot.*
 *W. W. Dimock, D. V. M., *Vet. Path. and Bact.*
 *C. S. Dorchester, B. S., (Asst.) *Farm Crops.*
 †T. R. Douglass, B. S., (Ext. Assoc.) *Farm Crops and Soils.*
 †A. W. Dox,¹ Ph. D., *Chief Chem.*
 †Russell Dunn, B. S., *Asst. An. Husb.*
 *L. W. Durrel, M. S., *Instr. Plant Path.*
 *E. E. Eastman, M. S., (Assoc.) *Soils.*
 *Honora English, B. S., *Instr. Dom. Art.*
 †A. T. Erwin, M. S., *Chief Truck Crops.*
 *†J. M. Evvard, M. S., (Assoc.) *An. Husb.; Asst. Chief An. Husb.*
 *H. E. Ewing, Ph. D., (Assoc.) *Ent.*
 †R. K. Farrar, B. S., (Ext.) *Agr. Ed.*
 *Myrtle Ferguson, B. S., (Assoc.) *Home Econ.*
 *E. F. Ferrin, B. S., (Assoc.) *An. Husb.*
 *Genevieve Fisher, B. S., (Assoc.) *Agr. Ed.*
 †C. L. Fitch, A. M., (Ext. Assoc.) *Truck Gard.*
 †L. W. Forman, M. S., *Chief in Field Expts.*
 †L. G. Foster, M. A., *Field Agt. in Marketing.*
 †W. A. Foster, B. S., B. Arch., *Asst. in Agr. Engin.*
 *C. C. Fowler, Ph. D., (Assoc.) *Chem.*
 †W. G. Gaessler, B. S., *Actg. Chief Chem.*
 *Winifred S. Gettemy, (Assoc.) *Dom. Art.*
 *H. H. Gibson, M. A., (Asst.) *Agr. Ed.*
 *†L. S. Gillette, M. S., (Assoc.) *Dairy Husb.; Asst. Chief Dairy Husb.*
 †J. S. Glass, B. S. A. E., *Asst. in Agr. Engin.*
 *G. H. Godfrey, B. S., *Instr. Bot.*
 *Helen P. Goodrich,¹ *Instr. Dom. Art.*
 *J. D. Grossman, D. V. M., (Asst.) *Vet. Anat., Histol.*
 *W. F. Guard,¹ D. V. M., (Asst.) *Vet. Surg.*
 *J. E. Guthrie, M. S., *Zool.*
 *†B. W. Hammer, B. S., *Dairy Bact.; Chief Dairy Bact.*
 †H. P. Hansen, B. S., *Asst. in Field Expts.*
 *F. M. Harrington, B. S., (Assoc.) *Hort.*
 *B. M. Harrison, M. S., (Asst.) *Zool.*
 †H. B. Hart, B. S., (Ext. Assoc.) *An. Husb.*
 *†Albert Hartzell, M. S., *Asst. Ent.*
 *A. J. Hauser, B. S., (Asst.) *Dairying.*
 †M. A. Hauser, B. S., (Ext.) *Farm Crops and Soils.*
 *Anna H. Hawkes, *Instr. Dom. Art.*
 *Ada Hayden, M. S., *Instr. Bot.*
 *Anson Hayes, M. S., *Instr. Chem.*
 *W. R. Hechler, B. S., (Assoc.) *Farm Crops.*
 *M. D. Helsel, M. S., *Instr. An. Husb.*
 *Anna M. Henderson, *Instr. Dom. Art.*
 †R. S. Herrick, B. S., (Ext.) *Pomol.*
 *H. L. Hertz, *Instr. Agr. Engin.*
 *Blanche Hilliker, *Instr. Dom. Art.*
 †M. H. Hoffman, B. S. A. E., (Ext.) *Agr. Engin.*
 †F. B. Howe, M. S., *Asst. in Soil Survey.*
 *†H. D. Hughes, M. S. A., *Farm Crops; Chief Farm Crops.*
 *Jane A. Humphrey, (Asst.) *Dom. Sci.*
 *K. C. Ikeler, M. S., (Assoc.) *An. Husb.*
 *Blanche Ingersoll, B. S., *Instr. Dom. Sci.*
 †O. F. Jensen,¹ M. S., *Asst. in Farm Crops.*

- *†H. W. Johnson,¹ M. S., (*Asst.*) *Soils*; *Asst. in Soils.*
- *Rosamond H. Kedzie, B. S., *Instr. Dom. Sci.*
- *T. O. Kellems, B. S., *Asst. in Chem.*
- *J. B. Kelley, B. S. (M. E., A. E.), (*Asst.*) *Agr. Engin.*
- †Mary Kelly, B. S., *Asst. Club Leader.*
- †Charlotte M. King, *Asst. Chief Bot., Asst. in Seed Anal.*
- *R. E. Kirk, M. S., *Asst. in Chem.*
- *†Herman Knapp, B. S. A., *Treas., Registrar.*
- †Neale S. Knowles, (*Ext.*) *Home Econ.*
- *William Kunerth, M. A., (*Assoc.*) *Phys.*
- †S. B. Kuzirian, Ph. D., *Asst. Chem.*
- †H. M. Lachie, B. S., (*Ext. Asst.*) *Poultry Husb.*
- *W. F. LaGrange, B. S., *Instr. An. Husb.*
- †A. R. Lamb, M. S., *Asst. Chem.*
- †H. L. Lantz, M. S., *Asst. in Pomol.*
- †W. H. Lapp, B. S., (*Ext. Asst.*) *Poultry Husb.*
- *T. S. Leith, D. V. M., *Instr. Vet. Anat., Histol.*
- *Max Levine, B. S., (*Asst.*) *Bact., Hyg.*
- *†O. G. Lloyd, M. S., (*Assoc.*) *Farm Mgt.; Asst. Chief Farm Mgt.*
- *†O. Lloyd-Jones, Ph. D., (*Assoc.*) *An. Husb.; Asst. An. Husb.*
- *W. C. Lott, B. S., *Instr. Bot.*
- †A. C. McCandlish, M. S., *Asst. Dairy Husb.*
- †Murl McDonald, B. S., *Asst. County Agt. Leader.*
- *Clyde McKee, B. S., (*Assoc.*) *Farm Crops.*
- *Miss W. B. McNeal, B. S., (*Asst.*) *Home Econ.*
- *S. H. McNutt, D. V. M., *Instr. Vet. Path.*
- *†G. B. MacDonald, M. F., *For.; Chief For.*
- *Catherine J. MacKay, *Home Econ., Dean Home Econ. Div.*
- †T. J. Maney, B. S., *Chief Pomol.*
- *J. N. Martin, Ph. D., *Plant Morphology.*
- *†I. E. Melhus, Ph. D., *Plant Path.; Chief Plant Path.*
- *E. M. Mervine, M. E., (*Assoc.*) *Agr. Engin.*
- *†F. E. Millen, B. S., (*Asst.*) *Apiculture.*
- *Charles Miller, B. S., *Instr. Agr. Engin.*
- *Cora B. Miller, B. S., *Instr. Home Econ.*
- *Ethelwyn Miller, A. M., *Dom. Art.*
- †Mrs. Katherine S. Miller, B. S., *Ext. Asst. in Home Econ.*
- *†R. D. Miller, B. S., *Instr. Poultry Husb.; Asst. in Poultry Husb.*
- *Helen Monsch, A. M., (*Assoc.*) *Dom. Sci.*
- *G. C. Morbeck, M. F., (*Assoc.*) *For.*
- *†Martin Mortensen, B. S. A., *Dairying; Chief in Dairying.*
- *†H. B. Munger, B. S., *Farm Mgt.; Chief Farm Mgt.*
- *H. S. Murphy, D. V. M., *Vet. Anat., Histol.*
- *Charles Murray, D. V. M., *Vet. Invest.*
- *Nellie M. Naylor, B. A., *Instr. Chem.*
- *N. L. Nelson,¹ D. V. M., (*Asst.*) *Vet. Practice and Diagnosis.*
- †H. E. Nichols, B. S., *Asst. in Pomol.*
- *H. R. O'Brien, M. A., (*Asst.*) *Agr. Journalism.*
- *Ruth O'Brien, M. A., (*Asst.*) *Chem.*
- †F. L. Odell, (*Ext. Asst.*) *Dairy Mfrs.*
- *Anna M. Olsen, B. S., (*Asst.*) *Dom. Sci.*
- †M. E. Olson, M. S., *Asst. in Field Expts.*
- *†L. H. Pammel, Ph. D., *Bot.; Chief Bot.*
- †O. W. Park, B. S., *Asst. in Apiculture.*
- †R. J. Pearse, M. L. A., *Ext. Landsc. Gard.*
- *†W. H. Pew, B. S. A., *An. Husb.; Chief An. Husb.*
- *E. A. Piester, B. S., *Instr. Landsc. Arch.*
- *†R. S. Potter, Ph. D., (*Assoc.*) *Soils; Asst. Chief Soil Chem.*
- *P. F. K. Purwin, *Lab. Asst. in Vet. Invest.*
- †E. L. Qualfe, B. S., (*Ext.*) *An. Husb.*
- †Robina M. Rae, *Asst. Libr.*
- *J. O. Rankin, M. A., (*Assoc.*) *Rural Econ.*
- *John Reardon, *Asst. in Hort.*
- *Esther Rebok, B. S., *Instr. Dom. Sci.*
- *R. R. Renshaw, Ph. D., (*Assoc.*) *Chem*
- *I. L. Ressler, A. B., *Instr. Zool.*
- †L. L. Rhodes, B. S., *Asst. in Soil Survey.*
- *C. D. Rice, D. V. M., (*Assoc.*) *Vet. Path. and Bact.*
- *Mrs. L. S. Rice, B. S., *Instr. Chem.*
- †E. H. Richardson, *Asst. in Photog.*
- †Mary B. Richardson, B. D., *Ext. Asst. in Home Econ.*
- *E. H. Rucker, B. S., (*Asst.*) *Poultry Husb.*
- †A. W. Rudnick, B. S., (*Ext. Assoc.*) *Dairying.*
- †R. A. Rudnick, B. S., *Asst. in Truck Crops.*
- *Mabel Russell, *Instr. Dom. Art.*
- *†C. F. Salt, B. S., (*Asst.*) *Agr. Journalism, Asst. Bul. Editor.*
- *L. R. Sanders, *Instr. Dairying.*
- *D. L. Scoles, B. S., *Asst. in Chem.*
- *H. A. Scullen, A. B., (*Asst.*) *Zool.*
- *W. E. Sealock, A. B., (*Assoc.*) *Agr. Ed.*
- *P. S. Shearer, B. S., (*Assoc.*) *An. Husb.*
- *C. K. Shedd, B. S. A. E., (*Assoc.*) *Agr. Engin.*
- *F. F. Sherwood, A. M., *Instr. Chem.*
- †A. A. Smith, *Ext. Sec.*
- *Ruth M. Smith, B. S., *Instr. Dom. Sci.*
- †R. S. Snyder, B. S., *Asst. in Soil Chem.*
- *L. B. Spinney, B. M. E., B. S. E. E., *Phys.*

¹ On leave.

*†C. H. Stange, D. V. M., *Vet. Med.*, *Dean Div. Vet. Med.*; *Chief Vet.*

*E. W. Stanton, M. S., LL. D., *Vice Pres.*

*†W. H. Stevenson, B. S. A., *Farm Crops and Soils*, *Chief in Agron. and Vice Dir. Sta.*

*B. P. Stonecipher, B. S., *Instr. Truck Crops*.

*Lillian B. Storms, B. S., *Instr. Chem.*

†K. W. Stouder, D. V. M., (*Ext.*) *Vet. Med.*

*†H. E. Summers,¹ B. S., *Zool.*; *Chief Ent.*

†F. C. Taff, B. S., (*Ext.*) *Farm Crops and Soils*, *Asst. Dir. Agr. Ent.*

*L. A. Test, Ph. D., (*Assoc.*) *Chem.*

†S. H. Thompson, B. S., *Farm Mgt. Dem.*

*M. G. Thornburg, B. S. A., *An. Husb.*

*A. S. Thurston, M. S., (*Asst.*) *Flor.*

*T. R. Truax, B. S., (*Asst.*) *For.*

*Cecile Van Steenberg, B. S., *Instr. Dom. Art.*

*H. W. Vaughan, M. S. A., (*Assoc.*) *An. Husb.*

†I. H. Vogel, M. S., *Research Asst. in Plant Path.*

*†G. H. Von Tungeln, M. A., (*Assoc.*) *Rural Sociol.*; *Chief Rural Sociol.*

†H. W. Warner, M. S., *Asst. in Soil Survey*.

†R. L. Webster, A. B., *Actg. Chief Ent.*

*D. P. Weeks, jr., B. S. A. E., *Instr. Agr. Engin.*

*H. R. Werner, A. M., *Instr. Zool.*

*W. C. O. White, A. B., *Asst. in Chem.*

†W. E. Whitehouse,¹ B. S., *Asst. in Pomol.*

*F. S. Wilkins, M. S., *Instr. Farm Crops*.

*J. A. Wilkinson,¹ Ph. D., (*Assoc.*) *Chem.*

*L. E. Willey, D. V. M., (*Assoc.*) *Vet. Invest.*

*N. J. Williams, A. B., *Asst. in Chem.*

*G. M. Wilson, M. A., *Agr. Ed.*

†H. B. Winchester, M. S., *Office Asst. in An. Husb.*

*Polly Witwer, M. A., (*Asst.*) *Dom. Sci.*

†P. M. Wolf, B. S., *Asst. in Field Expts. (Storm Lake)*.

†J. E. Wooters, M. A., *Asst. County Agt. Leader*.

*A. J. Wuertz, M. A., *Instr. Chem.*

*Robert Wylie, A. M., *Instr. An. Husb.*

*Zelma Zentmire, M. S., *Instr. Chem.*

*L. E. Yocum, B. S., *Instr. Plant Morphol.*

KANSAS.

Kansas State Agricultural College and the Agricultural Experiment Station, Manhattan.

*College faculty. †Station staff. ‡Extension staff.

*†W. M. Jardine, B. S. A., LL. D., *President*, *Dir. of Sta.*

†E. C. Johnson, M. A., *Dean Ext. Div.*, *State Leader of County Agts.*

*†J. E. Ackert, Ph. D., (*Assoc.*) *Zool.*; *Parasitol.*

*†M. F. Ahearn, M. S., *Landsc. Gard.*; *Veg. and Forcing Crops*.

†Mrs. Harriet W. Allard, *Specialist in Home Econ.*

*W. G. Allee, B. S., *Instr. Phys.*

†H. H. Amos, B. S., *Supt. of Poultry Farm*.

*Grace C. Averill, *Instr. Home Art.*

†Mary M. Baird, B. S., *Ext. Instr. Home Econ.*, *Home Study Service*.

*Rebecca P. Bartholomew, *Asst. in Dom. Sci.*

*Mrs. Bessie W. Birdsall, *Dom. Art.*

†I. T. Bode, B. S., *Foreman For. Nursery, Branch Sta., Hays*.

*†R. K. Bonnett, M. S., (*Asst.*) *Farm Crops*; *Farm Crops*.

†H. J. Bower, M. S., *Specialist in Soils*.

†H. Broberg, B. S., C. E., *Drainage Engin.*

†C. B. Brown, B. S., *Asst. in Dry Land Agr.*, *Garden City Branch Sta. (Coop. U. S. D. A.)*.

†Frances L. Brown, B. S., *Dir. Home Econ.*

*H. W. Brubaker, Ph. D., (*Asst.*) *Chem.*

*Winfield Burchard, M. A.; *Instr. Chem.*

†Walter Burr, *Dir. Rural Service*.

*J. H. Burt, D. V. M., (*Assoc.*) *Vet. Med.*

†M. G. Burton, A. B., *Dir. Home Study Service*.

*†L. D. Bushnell, M. S., *Bact.*

†Eula B. Butzerin, R. N., *Specialist in Home Nursing*.

†Louise Caldwell, A. B., *Specialist in Home Econ.*

*†L. E. Call, M. S., *Agron.*

*Jane Cape, B. S., *Instr. Dom. Sci.*

†S. P. Clark, B. S., *Supt. Colby Branch Sta.*

*†W. A. Cochel, B. S., *An. Husb.*

*Ina F. Cowles, B. S., (*Asst.*) *Dom. Art.*

*Jennie L. Cox, B. S., (*Asst.*) *Dom. Sci.*

*N. A. Crawford, jr., A. M., *Indus. Journalism, Supt. of Printing*.

*†J. W. Crumbaker, B. S., *Instr. An. Husb.*; *Supt. of Land and Livestock*.

†C. C. Cunningham, B. S., *Coop. Expts.*

*W. E. Davis, A. B., (*Asst.*) *Bot.*

*†W. R. Davis, B. S., *Instr. Dairy Husb.*; *Asst. in Dairy Mfrs.*

*†G. A. Dean, M. S., *Ent. (State Ent.)*.

- *†Albert Dickens, M. S., *Hort.*
- *A. M. Doerner, B. S., *Instr. Landsc. Gard.*
- *H. S. Doty, M. S., *Instr. Bot.*
- *†Leila Dunton, M. S., *Instr. Milling Indus.; Wheat and Flour Invest.*
- *Hugh Durham, A. M., *Asst. to Dean of Agr.*
- *R. R. Dykstra, D. V. M., *Vet. Surg.*
- *K. J. T. Ekblaw, M. E., M. S., *Farm Engin.*
- *Cecil Elder, D. V. M., *Asst. in Path.*
- *L. H. Fairchild, B. S., *Asst. in Dairy Husb.*
- *Emma F. Fecht,¹ *Instr. Dom. Art.*
- †H. H. Fenton, B. S., *Specialist in Indus. Subjects, Home Study Service.*
- *Louise Fewell, *Instr. Dom. Art.*
- *†J. B. Fitch, B. S., (*Assoc.*) *Dairy Husb.; Asst. in Dairy Prod.*
- *†L. A. Fitz, B. S., *Milling Indus.*
- *E. V. Floyd, B. S., (*Asst.*) *Phys.*
- *†F. E. Fox, B. S., *Asst. in Poultry Husb.*
- *†P. L. Galney, M. S., (*Asst.*) *Bact.; Asst. in Soil Bact.*
- *†Ray Gatewood, B. S., *Instr. An. Husb.; Swine Invest.*
- †R. E. Getty, B. S., *Forage Crops, Branch Sta., Hays (Coop. U. S. D. A.).*
- *J. B. Gingery, D. V. M., *Instr. Vet. Med.*
- *Grace Glasgow, M. S., *Instr. Bact.*
- *†L. W. Goss, D. V. M., *Path.; Histol.*
- *Helen L. Green, B. S., *Instr. Dom. Sci.*
- †G. O. Greene, M. S., *Specialist in Hort.*
- *†W. E. Grimes, B. S., (*Asst.*) *Farm Mgt.; Farm Mgt.*
- *Margaret H. Haggart, A. M., *Dom. Sci.*
- †O. E. Hall, A. B., *State Leader Boys' and Girls' Clubs.*
- †A. L. Hallsted, B. S., *Asst. in Dry Farming, Branch Sta., Hays (Coop. U. S. D. A.).*
- *Helen H. Halm, B. S., (*Asst.*) *Home Econ., Ed.*
- *J. O. Hamilton, B. S., *Phys.*
- *L. D. Hammond, Ph. D., *Instr. Chem.*
- †Mrs. Elizabeth P. Harling (*Seed Analyst.*)
- *†Mary T. Harman, Ph. D., (*Asst.*) *Zool.; Cytology Invest.*
- *Marian Harrison, *Asst. in Dom. Art.*
- †A. C. Hartenbower, B. S., *Supt. Insts. and Ext. Schools.*
- †W. P. Hayes, B. S., *Asst. in Staple Crop Insect Invest.*
- †G. S. Hine, B. S., *State Dairy Comr.*
- †C. W. Hobbs, D. V. M., *Field Vet. in charge Serum Prod.*
- *†A. G. Hogan,¹ Ph. D., (*Asst.*) *An. Nutr.; Asst. in An. Nutr.*
- *Araminta Holman,¹ (*Asst.*) *Home Art.*
- *E. L. Holton, Ph. D., *Education.*
- *J. S. Hughes, Ph. D., (*Asst.*) *Chem.*
- *Florence Hunt, *Asst. in Dom. Art.*
- *†O. W. Hunter, M. S., (*Assoc.*) *Bact.; Asst. Dairy Bact.*
- †P. R. Imel, B. S., *Asst. in Boys' and Girls' Clubs.*
- *Ethel H. Jones, B. S., *Instr. Dom. Art.*
- †H. M. Jones, B. S. A., *Deputy State Dairy Comr.*
- *Loula E. Kennedy, A. B., R. N., (*Asst.*) *Dom. Sci.*
- *H. L. Kent,¹ B. S., (*Assoc.*) *Ed., Prin. School of Agr.*
- †F. A. Kiene, jr., B. S., *Asst. in Cereal Crops, Branch Sta., Hays (Coop. U. S. D. A.).*
- *H. H. King,¹ M. S., (*Assoc.*) *Chem.*
- †F. W. Kirk, B. S., *Negro Ext. Agt.*
- †M. W. Kirkpatrick, *Supt. Tribune Branch Sta.*
- †R. W. Kiser, B. S., (*Ext.*) *An. Husb.*
- †G. S. Knapp, B. S., *Supt. Garden City Branch Sta.*
- †J. B. Kuska, B. S. A., *Asst. in Dry Land Agr., Colby Branch Sta. (Coop. U. S. D. A.).*
- †A. E. Langworthy, Ph. C., *Asst. in Feed Control.*
- *†W. L. Latschaw, B. S., (*Asst.*) *Chem.; Asst. in Soil Anal.*
- †M. N. Levine,¹ M. S., *Asst. Plant Path.*
- *H. F. Lienhardt, V. M. D., *Instr. Bact.*
- *†W. A. Lippincott, M. S., *Poultry Husb.*
- *†C. W. McCampbell, B. S., D. V. M., (*Assoc.*) *An. Husb.; Horse Feeding Invest.*
- *Nelle McClurg, A. B., *Instr. Dom. Sci.*
- *†J. W. McCulloch, B. S., *Instr. Ent.; Asst. in Staple Crop Insect Invest.*
- *Mary M. McDonald, Ph. B., *Asst. in Dom. Art.*
- †P. E. McNall, M. S., *Asst. in Farm Mgt.*
- *†Theodore Macklin,¹ Ph. D., (*Asst.*) *Agr. Econ.; Agr. Econ.*
- †Stella Mather, B. S., *Specialist in Home Econ.*
- *†L. E. Melchers, M. S., (*Asst.*) *Bot.; Plant Path.*
- *†J. H. Merrill, Ph. D., (*Asst.*) *Ent.; Asst. in Fruit Insect Invest.*
- †Lottie Millam, B. S., *Asst. in Boys' and Girls' Clubs.*
- *†E. C. Miller, Ph. D., (*Asst.*) *Plant Physiol.; Asst. Plant Physiol.*
- *Flora Monroe, B. S., *Instr. Dom. Sci., Dir. of Cafeteria.*
- †E. J. Montague, B. S., *Asst. to Supt. of Branch Sta., Hays.*
- †J. T. Montgomery, B. S., *Specialist in An. Husb.*

¹ On leave.

- *†R. A. Muttkowski, Ph. D., *Instr. Zool.; Asst. Zool.*
 *†R. K. Nabours, Ph. D., *Zool.; An. Genetics Invest.*
 †A. S. Neale, B. S., *Specialist in Dairy Husb.*
 *P. J. Newman, M. S., (*Assoc.*) *Chem., Actg. Head of Dept.*
 *Grace A. Palmer, *Asst. in Dom. Art.*
 *Grace M. Palmer, Ph. B. Ed., *Instr. in charge of Home Art.*
 *†J. H. Parker, M. S., (*Asst.*) *Farm Crops; in charge Crop Improvement.*
 †C. M. Parks, *Miller.*
 †T. H. Parks, B. S., *Specialist in Ent.*
 *†A. M. Paterson, B. S., (*Asst.*) *An. Husb.; Sheep Invest.*
 *S. J. Pearce, B. S., *Asst. Bact.*
 *Josephine C. Perry, B. S., *Asst. in Dom. Sci.*
 *J. C. Peterson, Ph. D., (*Asst.*) *Ed.*
 †W. E. Peterson, M. S., *Specialist in Dairy Husb.*
 †G. H. Phinney, *Foreman of Agron. Farm.*
 †G. M. Potter, D. V. M., *Vet. Specialist.*
 *H. A. Pratt, B. S., *Asst. in Hort.*
 *R. E. Preston, M. S., *Instr. Chem.*
 †Lena L. Price, *Research Asst. to Dir. of Sta.*
 *C. L. Quear, *Asst. to Pres.*
 *G. E. Raburn,¹ M. S., (*Asst.*) *Phys.*
 *K. W. Reed, M. A., *Asst. in Chem.*
 *†O. E. Reed, M. S., *Dairy Husb.*
 *Lenore Richards, B. A., *Asst in Dom. Sci.*
 *†H. F. Roberts,¹ M. S., *Bot., Plant Brgd.*
 *†S. C. Salmon, B. S., *Farm Crops; Asst. in Farm Crops.*
 *W. H. Sanders, M. E., *Instr. Farm Motors.*
 †Susanna Schnemayer, B. S., *Specialist in Home Econ.*
 *J. P. Scott, D. V. M., *Asst. in Vet. Med.*
 †Minnie Sequist, A. B., *Specialist in Home Econ.*
 *†M. C. Sewell, M. S., (*Asst.*) *Soils; Asst. in Soils.*
 *Olive Sheets, M. S., (*Assoc.*) *Dom. Sci.*
- *†R. M. Sherwood, B. S., *Poultry Husb.*
 †Alice Skinner, B. S., *Instr. Dom. Sci.*
 *V. Smiley, B. S., *Instr. Chem.*
 *A. B. Smith, B. L. S., *Libr.*
 †H. E. Smith, *Asst. in Feed Control Office.*
 †W. S. Stevens, B. S., *Assoc. in Stock Remedy Anal.*
 †V. L. Strickland, A. M., *Specialist in Ed. Subjects, Home Study Service.*
 *†C. O. Swanson, M. Agr. (*Assoc.*) *Agr. Chem.; Assoc. Chem.*
 †E. L. Tague, M. A., *Protein Invest.*
 *†M. C. Tanquary, Ph. D., (*Asst.*) *Ent.; Asst. in Staple Crop Insect Invest.*
 †C. P. Thompson, B. S., *Specialist in An. Husb.*
 †G. E. Thompson, B. S., *Specialist in Crops.*
 *†R. I. Throckmorton, B. S., (*Assoc.*) *Soils; Asst. in Soils.*
 †E. C. Thurber, B. S., *Hog Herdsman.*
 †R. W. Titus, A. M., *Asst. Chem. in An. Nutr.*
 †A. F. Turner, B. S., *Asst. County Agt. Leader.*
 †H. J. C. Umberger, B. S., *County Agt. Leader.*
 *†Ethel N. Vanderwillt, B. S., *Instr. An. Husb.; Expt. Records.*
 *Mrs. Mary P. Van Zile, *Dean of Home Econ.*
 *†C. M. Vestal,¹ B. S., (*Asst.*) *An Husb.; Asst. in An. Nutr.*
 †C. R. Weeks, M. A., *Supt. Fort Hays Branch Sta., Hays.*
 †R. C. Wiley, B. S., *Assoc. in Feed Stuffs and Fert. Anal.*
 *†J. T. Willard, D. Sc., *Chem. Vice Pres. of Coll. and Vice Dir. of Sta.*
 †L. C. Williams, B. S., *Asst. in Boys' and Girls' Club Work.*
 †B. S. Wilson, B. S., *Asst. in Coop. Expts.*
 †Charles Wilson, *Dairy Herdsman.*
 †Mary E. Wright, *Specialist in Home Econ.*
 *J. W. Zahnley, B. S., *Instr. Farm Crops.*
 †D. W. Ziegler, B. S., *Instr. An. Husb.; Home Study Service.*

¹ On leave.

KENTUCKY.

College of Agriculture and the Agricultural Experiment Station of the University of Kentucky, Lexington.

*College faculty. †Station staff. ‡Extension staff.

*F. L. McVey, Ph. D., LL. D., *President of University.**†T. P. Cooper, B. S., *Dean of Coll. of Agr. Dir. of Sta.*‡Fred Mutchler, Ph. D., *Dir of Agr. Ext.*

- †R. M. Allen,¹ M. A., *Head Food and Drug Dept.*
- *††W. S. Anderson, M. A., *Asst. An. Husb.*
 †S. D. Averitt, M. S., *Chem.*
 †P. E. Bacon, *Tester of Dairy Herds.*
 *H. S. Barker, LL. D., *Vice Pres.*
 †P. L. Blumenthal, Ph. D., *Research Chem.*
 †L. A. Brown, Phar. D., *Drug Chem., Food and Drug Dept.*
 †A. L. Brueckner, B. S., *Asst. in Diseases of Live Stock.*
 †T. R. Bryant, B. S., *Asst. Dir. Agr. Ext.*
 *Ruby M. Buckman, B. S., (Asst.) *Household Arts.*
 †G. D. Buckner, Ph. D., *Research Chem.*
 †A. S. Chapin, *Agt. in Poultry Clubs. (Coop. U. S. D. A.)*
 †N. M. Cregor, B. S., *Insp. Food and Drug Dept.*
 †H. E. Curtis, M. S., *Head Fert. Dept.*
 †Mary LeG. Didlake, M. S., *Asst. Ent., Bot.*
 †N. R. Elliott, B. S., *Specialist in Hort.*
 †A. E. Ewan, B. S., *Supt. Expt. Fields, Greenville.*
 †J. U. Field, *Field Agt. in Marketing.*
 *†Harrison Garman, D. Sc., *Ent., Zool.; Head Ent. and Bot. Dept.*
- *††E. S. Good, M. S., *An. Husb.; Head An. Husb. Dept. (Beef Cattle, Sheep, Swine).*
- *†A. N. Gordon,¹ B. S., *Instr. Farm Corps; Asst. in Agron.*
- *†E. J. Gott, B. S., *Asst. Bact.*
 †Carrie L. Hathaway, *Seed Analyst.*
 †D. J. Healy, M. D., *Research Bact.*
 *†S. L. Hibberd, B. S., *Instr. Agr.; Asst. Agr.*
 *†J. J. Hooper, M. S. A., *An. Husb.; Head An. Husb. Dept. (Dairy Cattle, Horses, Poultry).*
- *††J. R. Humphrey, *Head Dept. of Markets.*
 †Ed Huston, *Asst. in Dairying.*
 †W. D. Iler, *Asst. Chem.*
 †Elmer Ingram,¹ *Chief Insp. Dept. Coml. Feed Stuffs.*
 †H. H. Jewett, M. A., *Research Asst. Ent., Bot.*
 †R. W. Jones,¹ *Insp. Feeds and Fert.*
 *†P. E. Karraker, M. A., (Asst.) *Soil Phys.; Asst. Agron.*
 †Otis Kercher, B. S., *in charge Pig Club Work (Detailed U. S. D. A.).*
- *††E. J. Kinney, B. S., (Assoc.) *Agron.; Asst. Agron.*
 †J. O. La Bach, M. S., *Actg. Head and Chief Chem., Food and Drug Dept.*
 †O. S. Lee,¹ B. S., *Asst. Chem. (Fert.).*
 *F. T. McFarland, M. S., (Asst.) *Bot.*
 †J. W. McFarlin, B. S., *Chief Insp. Foods and Drug Dept. (Franklin).*
 †J. S. McHargue, M. S., *Research Chem.*
 *†J. H. Martin, B. S., *Instr. Poultry Husb.; Asst. Poultry Husb.*
 *†C. W. Mathews, B. S., *Hort.; Head Hort. Dept.*
 *R. N. Maxson, Ph. D., *Inorg. Chem.*
 *A. McQ. Miller,¹ A. M., *Geol.*
 *J. R. Mitchell, A. B., *Instr. Chem.*
 †Geoffrey Morgan, *State Agt. in Farm Dem. Work.*
 †S. F. Musselman, V. S., *State Vet. (Frankfort).*
- *††W. D. Nicholls, M. S., *Farm Mgt.; Head Dept. of Farm Mgt.*
 †H. R. Niswonger, M. A., *Asst. in Field Work and Nursery Insp. (Ent., Bot.).*
 *†J. W. Nutter, *Instr. Dairy Lab.; Supt. Dairy Farm.*
 *†A. J. Olney, B. S., (Asst.) *Hort.; Asst. Hort.*
 †Cornelia C. Page, *Libr.*
 *M. L. Pence, M. S., *Phys.*
 †Elizabeth H. Perry, B. S., *Seed Analyst.*
 †Margaret Perry, *Seed Analyst.*
 *†A. M. Peter, D. Sc., *Soil Tech.; Head of Chem. Dept.*
 †W. R. Pinnell, M. D., *Bact., Food and Drug Dept.*
 *†R. L. Pontius, V. S., (Assoc.) *Vet. Sci.; Actg. Head Dept. of Diseases of Live Stock.*
 †C. S. Porter, A. B., Ph. G., *Insp. Food and Drug Dept.*
 *Linda Purnell, B. S., *Instr. Home Econ.*
 *Ellen A. Reynolds, M. S., (Asst.) *Nutr. and Sanitation.*
 *†H. C. Rhodes, *Asst. in An. Husb.*
 †G. M. Roach, *Insp. Food and Drug Dept.*
 *††George Roberts, M. S., *Agron.; Head of Agron. Dept.*
 †Wm. Rodes, M. S., *Chem. (Fert.).*
 *Mabel L. Roe, Ph. D., *Asst. Bot.*
 *C. H. Scott, A. B., *Instr. Geol.*
 †O. M. Shedd, M. S., *Research Chem.*
 †W. H. Simmons, V. S., *Insp. Food and Drug Dept. (Louisville).*

¹ On leave.

- †D. D. Slade, *Poultry Specialist*.
 †H. D. Spears, M. S., *Chem. (Coml. Feed Stuffs Dept.)*.
 *C. F. Stiles, B. S., *Asst. in Ent., Zool.*
 *Mary E. Sweeny, M. S., *Head Dept. of Home Econ.*
 *D. V. Terrell, C. E., (*Actg.*) *Rural and Highway Engin.*
 †W. G. Terrell, *Insp. Food and Drug Dept.*

- †J. D. Turner, LL. B., *Head Coml. Feed Stuffs Dept.*
 *F. E. Tuttle, Ph. D., *Chem.*
 *G. H. Vansell, (*Asst.*) *Ent., Zool.*
 †E. C. Vaughan, A. B., *Asst. Ent. and Bot.*
 *W. S. Webb, M. S., *Phys.*
 *Clara W. White, *Instr. Home Econ.*
 †Helen B. Wolcott, M. D., *State Agt. Home Dem. Work.*
 *†T. G. Yaxis, M. S., *Asst. in An. Husb.*

The Kentucky Normal and Industrial Institute for Colored Persons.
Frankfort.

*College faculty.

*G. P. Russell, A. B., LL. D., *President*.

- *M. Belle Anderson, *Instr. Dom. Sci.*
 *A. C. Burnette, *Dir. Agr. Dept.*
 *J. S. Estill, A. M., *Dean*.
 *D. L. Lawson, A. M., *Nat. Sci.*

- *Mrs. Anna T. O'Neal, *Instr. Dom. Art.*
 *Mrs. Addie G. Smith, *Dir. Laundry, Ma tron.*
 *P. P. Watson, *Manual Training*.

LOUISIANA.

The Louisiana State University and Agricultural and Mechanical College and the State Experiment Station, University Station, Baton Rouge; the Sugar Station, Audubon Park, New Orleans; the North Louisiana Station, Calhoun; and the Rice Station, Crowley.

*College faculty. †Station staff. ‡Extension staff.

*T. D. Boyd, A. M., LL. D., *President*.

*†W. R. Dodson, B. S., *Dean Coll. of Agr. Dir. of Stations. Agr.**

†W. R. Perkins, M. S., *Dir. Agr. Ext. Dept. State Agent.*

- *T. W. Atkinson, C. E., *Phys.*
 †W. H. Ballis, B. S., *Asst. in charge Boys' Pig Clubs*.
 *Susan L. Bates, B. S., *Instr. Home Econ.*
 *Annie M. Beale, *Libr.*
 *A. T. Bell, A. M., *Bot., Bact.*
 *J. M. Cadwallader, B. S., (*Asst.*) *An. Indus.*
 †G. D. Cain, B. S., *Chem. in charge of Fert. and Feed Stuffs Lab.*
 †R. C. Calloway, B. S., *in charge Dairy*.
 *C. E. Coates, Ph. D., *Chem.*
 *†W. H. Dalrymple, M. R. C. V. S., *Vet. Sci.; Vet. Vice Dir. of Stas.*
 *J. E. Day, Ph. D., *Instr. Chem.*
 †W. P. Denson, B. S., *Asst. Chem.*
 *E. B. Doran, B. S., (*Asst.*) *Agron.*
 †S. B. Dunbar, *Sec. Agr. Ext. Dept.*
 †Mayme Dworak, A. M., *Sci. Asst. Seed Lab. (Detailed U. S. D. A.)*
 †C. W. Edgerton, Ph. D., *Plant Path.*
 *†F. V. Emerson, Ph. D., *Geol.; in charge Soil Survey Work.*
 *Nellie Fitzgerald, B. S., *Dir. of Home Econ.*

- †J. B. Garrett, B. S., *Ent.*
 *W. H. Gates, B. A., *Zool., Ent.*
 †P. L. Guilbeau, B. S., *State Insp. Agr. Schools*.
 *D. V. Guthrie, Ph. D., *Phys.*
 †W. M. Hall, B. S., *Asst. Chem.*
 †Clara Helbing, *Insp. State Schools of Home Econ.*
 †C. E. Hester, B. S., *Asst. Dir. N. La. Sta.*
 †Alice S. Hickman, *State Agt. in Home Dem. Work.*
 †J. M. Jenkins, B. S., *Supt. Rice Sta. (Coop. U. S. D. A.)*
 †T. H. Jones, B. S., *Asst. Ent. (Detailed U. S. D. A.)*
 *E. L. Jordan, B. S., *An. Indus.*
 †A. P. Kerr, M. S., *Asst. Dir. State Sta.*
 *A. F. Kidder, B. S., *Agron.*
 †Nicholas Kopeloff, Ph. D., *Bact., Sugar Sta.*
 *J. G. Lee, B. S., *For., Hort.*
 †J. K. McHugh, *Sec., Sugar Sta.*
 †W. P. Martin, B. S., *Asst. in charge Boys' Corn Clubs*.
 *R. L. Menville, M. S., (*Asst.*) *Chem.*

¹ On leave.

‡Clyde Mobley, *Asst. Home Dem. Work.*
 †C. C. Moreland, B. S., *Asst. Plant Path.*
 *C. F. Moreland, B. S., *Instr. Bot.*
 †Harry Morris, D. V. M., *Bact., Asst. Vet.*
 †M. G. Osborn, B. A., *Editor.*
 †J. A. Redhead, *Asst. State Agt. Farmers' Coop. Dem. Work.*
 †E. S. Richardson, B. S., *Supt. Dept. Junior Ext. and Home Econ.*
 †A. F. Rolf, *Poultry Husb., Live Stock Ext. Dept.*
 *O. W. Rosewall, A. B., *Instr. Zool., Ent.*

‡Rhea C. Scott, *Specialist, Home Dem. Work.*
 *L. C. Slater, M. S., *Instr. Chem.*
 †C. H. Staples, B. S., *Dairying, Live Stock Ext. Dept.*
 *‡R. P. Swire, B. A., *Treas.*
 †W. G. Taggart, B. S., *Asst. Dir. Sugar Sta.*
 †M. C. Taylor, *Asst. in charge Poultry Clubs.*
 †‡G. L. Tiebout, B. S., *Hort., Packing and Shipping Dem.*
 †S. S. Walker, M. S., *Soil Chem.*
 †F. W. Zerban, Ph. D., *Chem., Sugar Sta.*

Southern University and Agricultural and Mechanical College of the State of Louisiana, Scotland Heights, Baton Rouge.

*College faculty.

*J. S. Clark, A. M., Ph. D., *President.*
 *Rena H. Branham, *Sewing.*
 *Riley Hamilton, B. S., *Agr.*
 *J. M. Harris, B. S., *Agr.*
 *Mrs. F. N. Maberry, *Cooking.*
 *Charles Pieters, A. B., *Agr.*

MAINE.

College of Agriculture and the Agricultural Experiment Station of the University of Maine, Orono.

*College faculty. †Station staff. ‡Extension staff.

*R. J. Aley, Ph. D., LL. D., *President of University.*
 *‡L. S. Merrill, M. D., *Dean Coll. of Agr. Dir. Agr. Ext. Service.*
 †C. D. Woods, Sc. D., *Dir. of Sta.*

†Alice W. Averill, *Lab. Asst. Ent.*
 †J. M. Bartlett, M. S., *Chem.*
 *Dorothea Beach, B. S., (*Asst.*) *Home Econ.*
 *Alice M. Borling, Ph. D., (*Assoc.*) *Zool.*
 *J. M. Briscoe, M. F., *For.*
 *B. S. Brown, M. S., *Hort.*
 *M. A. Chrysler, Ph. D., *Biol.*
 *H. N. Conser, M. S., (*Asst.*) *Bot.*
 *L. S. Corbett, M. S., *An. Indus.*
 †C. E. Crossland, B. S., *Asst. in Boys' Club Work.*
 †W. E. Curtis, *Sci. Aid (Monmouth).*
 *L. M. Dorsey, B. S., *Instr. Dairy Husb.*
 *C. W. Easley, Ph. D., *Chem.*
 *C. W. Eaton, M. F., (*Assoc.*) *For.*
 †Alfreda Ellis, B. S., *Asst. in Girls' Club Work.*
 †R. H. Fogler, M. S., *Asst. to Ext. Dir.*
 *Frances R. Freeman, M. S., *Home Econ.*
 †Kathryn T. Gordon, B. S., *Ext. Instr. Home Econ.*
 †J. W. Gowen, Ph. D., *Asst. Biol.*
 †R. L. Hammond, *Seed Analyst, Photog.*
 †H. H. Hanson,¹ M. S., *Chem.*

*R. M. Holmes,¹ M. A., (*Asst.*) *Phys.*
 †C. C. Inman, *Assistant.*
 †M. D. Jones, B. S., *Ext. Instr. Farm Mgt.*
 †H. L. King, B. S., *Asst. Chem.*
 *L. H. Merrill, Sc. D., *Biol. and Agr. Chem.*
 †J. R. Miner,¹ A. B., *Computer.*
 *H. G. Mitchell, A. M., (*Asst.*) *Chem.*
 †R. P. Mitchell, *in charge Boys' and Girls' Agr. Clubs.*
 †W. C. Monahan, B. S., *Ext. Instr. in Poultry.*
 †P. W. Monohon, B. S., *Asst. County Agt. Leader.*
 †Viola L. Morris, *Lab. Asst. in Plant Path.*
 †W. J. Morse, Ph. D., *Plant Path.*
 †Silvia Parker, A. B., *Asst. Biol.*
 †Edith M. Patch, Ph. D., *Ent.*
 †Catherine N. Platts, B. S., *Ext. Instr. Home Econ.*
 †G. B. Ramsey, A. M., *Asst. Plant Path. (Coop. U. S. D. A.).*
 *F. L. Russell, B. S., V. S., *Bact., Vet. Sci.*

¹ On leave.

†Michael Shapovalov, M. S., *Asst. Plant Path.* (*Coop. U. S. D. A.*).

*G. E. Simmons, M. S., *Agron.*

†Wellington Sinclair, *Supt. Highmoor Farm*, Monmouth.

*H. W. Smith,¹ B. S., (*Asst.*) *Bact.*

*J. S. Stevens, M. S., LL. D., *Phys.*

†J. E. Sullivan, *Supt. Aroostook Farm*, *Presque Isle*.

†F. M. Surface,¹ Ph. D., *Biol.*

†E. R. Tobey, B. S., *Asst. Chem.*

*L. F. Weeks, B. S., *Instr. Chem.*

†C. H. White, *Sci. Aid.*

*O. M. Wilbur, M. S., *Instr. Poultry Husb.*

*L. E. Woodman, Ph. D., (*Assoc.*) *Phys.*

†Jacob Zinn, D. Agr., *Asst. Biol.*

MARYLAND.

Maryland State College of Agriculture and the Agricultural Experiment Station, College Park.

*College faculty. †Station staff. ‡Extension staff.

*A. F. Woods, A. M., D. Agr., *President.*

†H. J. Patterson, D. Sc., *Director of Station.*

†T. B. Symons, M. S., *Director of Extension.*

†W. J. Aitcheson, B. S., *Asst. Agron.*

†R. S. Allen, *Asst. in Biol. Lab.*

*B. W. Anspen, B. S., *Landsc. Gard., Flor.* (*State Work*).

†C. O. Appleman, Ph. D., *Plant Physiol.*

†W. R. Ballard, B. S., *Pomol., Small Fruits.*

*Herman Beckenstrater, M. S., *Pomol.*

†F. B. Bomberger, A. M., *Asst. Dir. of Ext.*

†E. H. Brinkley, *Farm Supt.*

*P. F. Brookens, B. A., (*Asst.*) *Agr. Econ.*

*L. B. Broughton, M. S., *Anal. Chem.*

†S. S. Buckley, M. S., D. V. S., *An. Indus.*

*†Miss L. E. Conner, B. A., *Libr.*

*††E. N. Cory, M. S., *Zool., Ent.*

*F. H. Cotterman, M. A., *Dean Rural Ed. and Econ.*

*Myron Creese, E. E., *Phys.*

†Stanley Day, B. S., *Asst. in Boys' Club Work.*

†Paul Emerson, Ph. D., *Soil Bact.*

†L. W. Erdman, B. S., *Asst. in Soil. Lab.*

†Gertrude Erickson, *Asst. in Home Dem.*

†E. F. Fox, B. S., *Asst. in Boys' Club Work.*

†Phillip Garman, Ph. D., *Asst. Ent.*

†W. D. Gray, B. S., *Asst. in Boys' Club Work.*

†R. L. Hill, Ph. D., *Biochem.*

†D. J. Howard, B. S., *Asst. in Boys' Club Work.*

*T. D. Jarrell, B. S., *First Asst. Chem.* (*State Work*).

†G. F. Jordan, B. S., *Asst. in Publicity Work.*

†E. S. Johnston, Ph. D., *in charge Stone Fruit Invest.*

†Venia M. Kellar, B. S., *Home Econ.* (*Acting*).

†A. G. McCall, Ph. D., *in charge Soil Invest.*

†H. S. McConnell, B. S., *Ext. Ent.*

*H. B. McDonnell, M. S., M. D., *Chem.* (*State Chem.*).

†R. F. McHenry, B. S., *Boys' Club Work.*

†C. L. Meck, B. S., *Asst. Secd Analyst.*

†J. E. Metzger, B. S., *Agron.*

†J. B. S. Norton, M. S., *Bot., Plant Path.*

*A. T. O'Neill, *Asst. Chem.*

†C. L. Opperman, *Supt. Ridgely Substa.*

*C. J. Pierson, M. S., *Asst. Zool.*

*†R. C. Reed, D. V. M., *Dean An. Husb. Div.*

*C. G. Remsburg, M. S., *Asst. Chem.* (*State Work*).

†H. W. Rickey, *Ext. Poultry Husb.*

*R. C. Rose, Ph. D., *Assoc. Bot.*

*R. H. Ruffner, B. S., *An. Husb.*

†S. B. Shaw, M. S., *Ext. Pomol.*

*W. W. Smelker, B. S., *Instr. Farm Mach.*

†C. P. Smith, A. M., *Seed Insp.*

*A. C. Stanton, A. M., *Dairy Husb.*

*E. F. Stoddard, B. S., *Veg. Culture.*

*W. T. L. Taliaferro, D. Sc., *Farm Mgt.*

*†C. E. Temple, M. S., *Plant Path.* (*State Plant Path.*)

†R. C. Towles, B. S., *Asst. An. Husb.*

†R. H. Waite, B. S., *Poultry Husb.*

*J. B. Wentz, M. S., *Farm Crops.*

*H. J. White, B. S., *Instr. Chem.* (*State Work*).

†T. H. White, M. S., *Hort.*

†G. E. Wolcott, M. S., *Specialist in Dairying* (*Coop. U. S. D. A.*).

*P. W. Zimmerman, M. S., *Dean Plant Indus. Div.*

¹ On leave.

Princess Anne Academy for Colored Persons, Princess Anne.

*College faculty. ‡Extension staff.

*J. O. Spencer, Ph. D., *President* (Baltimore).*T. H. Kiah, A. M., *Principal*. Agr.*S. H. Dix, A. B., *Bot., Zool.**H. J. Hitch, *Market Gard.**Lucretia T. Kennard, *Dom. Sci. and Art.*‡Louis Martin, *Agr. Ext.**J. E. Smith, *Phys. Sci., Agr., Dairying.**Sara F. Tyler, *Dom. Sci. and Art.*

MASSACHUSETTS.

Massachusetts Agricultural College and the Agricultural Experiment Station, Amherst.

*College faculty. †Station staff. ‡Extension staff.

*K. L. Butterfield, A. M., LL. D., *President*. *Head Div. Rural Social Sci.*(*)*†W. P. Brooks, Ph. D., *Dir. of Sta. Lect. on Soil Fert.*(*) Agr.(†)†W. D. Hurd, M. Agr., *Dir. Ext. Service*. *Supervisor Short Courses.*†J. R. Alcock, *Asst. in An. Nutr.*†H. L. Allen, *Asst. Lab. Chem.*†W. A. Allen,¹ B. S., *Asst. Chem.**†P. J. Anderson, Ph. D., (*Assoc.*) *Bot.;*
Assoc. Plant Path.†L. W. Army, B. S., *Supervisor Corresp.*
*Courses and Ext. Editor.**S. C. Ball, Ph. D., *Instr. Zool.*†C. L. Beals, M. S., *Asst. Chem.**A. B. Beaumont, M. S., (*Assoc.*) *Agron.*†A. I. Bourne, B. A., *Asst. Ent.*†W. H. Bronson, B. S., *Ext. Instr. Farm*
Dem.†J. P. Buckley, jr., *Asst. Chem.**†A. E. Cance, Ph. D., *Agr. Econ.**J. S. Chamberlain, Ph. D., *Org. and Agr.*
Chem.†G. H. Chapman, Ph. D., *Research*
*Physiol.**W. W. Chenoweth, M. S., (*Assoc.*)
*Pomol.**†O. L. Clark, B. S., (*Asst.*) *Bot.;* *Asst.*
*Plant Physiol.**W. D. Clark, M. F., *For.*†R. L. Coffin, *Asst. Agr.*†Laura Comstock, (*Ext.*) *Home Econ.**G. C. Crampton, Ph. D., *Insect Morphol.*
ogy.†E. F. Damon, B. S., (*Ext. Assoc.*) *Agr.*
*Econ.**H. D. Drain, B. S., *Instr. Dairying.*†G. L. Farley, M. S., *Supervisor Junior*
*Ext. Work.**C. H. Fernald, Ph. D., *Hon. Dir. Grad.*
*School.**†H. T. Fernald, Ph. D., *Ent.**J. A. Foord, M. S., *Farm Administra-*
tion. Head Div. of Agr.†H. J. Franklin, Ph. D., *Supt. Cranberry*
*Substa. (East Warcham.)**†G. E. Gage,¹ Ph. D., (*Assoc.*) *An. Path.;*
An. Path.†E. F. Gaskill, B. S., *Asst. Agr.**†B. N. Gates, Ph. D., (*Assoc.*) *Bee Keep-*
ing; Apiarist.†H. D. Goodale, Ph. D., *Research Biol.*
*(Poultry Husb.).**C. E. Gordon, Ph. D., (*Assoc.*) *Zool.,*
*Geol.**†J. C. Graham, B. S., *Poultry Husb.**†C. R. Green, B. Agr., *Libr.**C. I. Gunness, B. S. M. E., *Rural Engin.**A. K. Harrison, (*Asst.*) *Landsc. Gard.**W. R. Hart, A. M., *Agr. Ed.**P. H. Hasbrouck, B. S., *Phys. Registrar.*†H. D. Haskins, B. S., *Chem. in charge*
*Fert. Div.**A. G. Hecht, B. S., (*Asst.*) *Flori.*†R. W. Henninger, B. S., *Ext. Instr. in*
charge Poultry Club Work.†E. B. Holland, Ph. D., *Assoc. Chem. in*
*charge Research Div.**E. G. Hood, B. S., *Instr. Microbiol.*†J. T. Howard, *Collector.**†Arao Itano, Ph. D., (*Asst.*) *Microbiol.;*
*Asst. Microbiol.**O. A. Jamison, M. S., (*Assoc.*) *Dairying.*†C. P. Jones, M. S., *Asst. Chem.**Earl Jones, M. S., (*Asst.*) *Agron.**†F. C. Kenney, *Treas.*†A. D. Kilham, A. B., *Ext. Instr. Pomol.*†W. S. Krout, Ph. D., *Field Plant Path.*†J. B. Lentz,¹ V. M. D., *Asst. in Vet. Sci.**E. M. Lewis, A. M., *Dean of Coll.**†J. B. Lindsey, Ph. D., *Chem. Vice Dir.*
*of Sta.**W. P. B. Lockwood, M. S., *Dairying.**F. A. McLaughlin, B. S., *Instr. Bot.**J. C. McNutt, B. S., *An Husb.**†C. E. Marshall, Ph. D., *Microbiol. Dir.*
*Grad. School.**F. G. Merkle, M. S., *Instr. Agron.*†E. L. Morgan, A. M., (*Ext.*) *Community*
*Planning.*¹ On leave.

- †F. W. Morse, M. S., *Research Chem.*
 ‡Helen N. Norris, *Ext. Instr. Agr. Ed.*
 *Joseph Novitski, *Asst. in Rural Sociol.*
 *†A. V. Osmun, M. S., *Bot. and Head of Dept.; Bot., Veg. Path.*
 †J. E. Ostrander, A. M., C. E., *Mct.*
 *†J. B. Paige,¹ B. S., D. V. S., *Vet. Sci.; Vet.*
 †S. R. Parker, B. S., (*Ext.*) *Rural Organization. State Leader of County Agts.*
 *L. F. Payne, B. S., (*Asst.*) *Poultry Husb.*
 †B. L. Peables, *Asst. Chem.*
 *W. M. Peacock, M. S., *Instr. Farm Mgt.*
 *C. A. Peters, Ph. D., *Inorg. and Soil Chem.*
 *John Phelan, M. A., *Rural Sociol.*
 *B. E. Pontius, B. S., (*Asst.*) *An. Husb.*
 *F. W. Rane, M. F., *Lect. on For. (Boston).*
 *W. S. Regan, Ph. D., *Instr. Ent.*
 †V. A. Rice, B. S., *Ext. Instr. in charge Pig Club Work.*
 *H. E. Robbins, M. A., (*Asst.*) *Phys.*
 †Marie Sayles,¹ B. S., *Ext. Instr. Home Econ.*
 †R. S. Scull,¹ B. S., *Asst. Chem.*
- *†F. C. Sears, M. S., *Pomol.*
 *Paul Serex, jr., M. S., *Instr. Chem.*
 †B. W. Shaper, B. S., *Asst. Dir. Ext. Service.*
 †J. K. Shaw, Ph. D., *Research Pomol.*
 †F. A. C. Smith, M. L. A., *Ext. Instr. Civic Improvement.*
 †J. B. Smith,¹ B. S., *Asst. Chem.*
 †P. H. Smith, M. S., *Chem. in charge Feed and Dairy Div.*
 *C. H. Thompson, M. S., (*Asst.*) *Hort.*
 *H. C. Thompson,¹ B. S., *Asst. in Phys.*
 *A. S. Thomson, A. M., (*Asst.*) *Market Gard., Supervisor Short Courses.*
 *††H. F. Tompson, B. S., *Head Dept. of Market Gard.; Market Gardener (Ar-lington).*
 †W. F. Turner, B. S., *Ext. Instr. An. Husb.*
 *S. E. Van Horn, *Instr. Dairying.*
 †S. C. Vinal, M. S., *Asst. Ent.*
 †L. S. Walker, B. S., *Asst. Chem.*
 *R. J. Watts, B. S., *Sec.*
 *†F. A. Waugh, M. S., *Landsc. Gard., Head Div. Hort.; Hort.*
 *Charles Wellington, Ph. D., *Chem.*
 *O. F. Wilkinson, *Instr. Agr. Econ.*

MICHIGAN.

The Michigan Agricultural College and the Agricultural Experiment Station, East Lansing.

*College faculty. †Station staff. ‡Extension staff.

- *F. S. Kedzie, D. Sc., *President.*
 *†R. S. Shaw, B. S. A., *Dir. of Sta. Dean of Agr.*
 †R. J. Baldwin, B. S., *Dir. of Ext. Work.*
- *†A. C. Anderson, B. S., *Dairy Husb.*
 *†H. A. Andrews, B. S., *Asst. in Dairying.*
 †C. F. Barnum, B. S., *Insp. Fert. and Feeds.*
 *W. B. Barrows, B. S., *Zool., Physiol.*
 *W. J. Beal, Ph. D., D. Sc., D. Agr., *Bot. Emeritus.*
 *J. W. Benner, D. V. M., (*Asst.*) *Vet. Med.*
 †E. F. Berger, B. S., *Asst. Chem.*
 *S. G. Bergquist, A. B., *Instr. Zool.*
 *A. M. Berridge, B. S., *Supt. Short Courses.*
 *†E. A. Bessey, Ph. D., *Bot.*
 *A. L. Bibbins,¹ B. S., *Instr. Farm Crops.*
 *Zella E. Bigelow, *Instr. Dom. Art.*
 †G. J. Bouyoucos, Ph. D., *Research Assoc. in Soils.*
 †S. S. Boyce, *Fiber Invest.*
 †A. M. Brown, A. B., *Sec., Treas.*
 *†C. W. Brown, B. S., *Instr. Bact.; Research Asst. Bact.*
 *†G. A. Brown, B. S., (*Assoc.*) *An. Husb.; Assoc. in charge An. Husb.*
 *P. S. Brundage, B. S., *Instr. Chem.*
- *†C. H. Burgess, B. A., (*Assoc.*) *Poultry Husb.; Assoc. in charge Poultry Husb.*
 *J. E. Burnett, B. S., (*Asst.*) *Dairy Husb.*
 *F. A. Burt, B. S., (*Asst.*) *Gcol.*
 †J. H. Carmody,¹ M. H., *Hort. Specialist.*
 *D. C. Carpenter, B. S., *Instr. Chem.*
 *F. W. Chamberlain, B. S., D. V. M., (*Assoc.*) *Vet. Anat.*
 *C. W. Chapman, B. S., (*Assoc.*) *Phys.*
 *†A. K. Chittenden, M. F., *For.*
 *A. J. Clark, A. B., *Chem.*
 *Louise I. Clemens, B. S., *Instr. Dom. Sci.*
 *A. C. Conger, M. A., (*Asst.*) *Zool.*
 †C. B. Cook, B. S., *Asst. to State Leader.*
 *†L. H. Cooledge, A. M., (*Asst.*) *Bact.; Research Assoc. Bact.*
 *†G. H. Coons, Ph. D., (*Assoc.*) *Bot.; Research Assoc. Plant Path.*
 †Anna B. Cowles, B. S., *Asst. in Boys' and Girls' Club Work.*
 *J. F. Cox, B. S., (*Assoc.*) *in charge Farm Crops.*
 *H. T. Darlington, M. S., (*Asst.*) *Bot.*
 *Richard de Zeeuw, Ph. D., (*Assoc.*) *Bot.*

¹ On leave.

- †E. E. Down, B. S., *Asst. in Farm Crops.*
 *C. S. Dunford, M. A., (*Asst.*) *Rural Econ.*
 †W. C. Dutton, B. S., *Asst. Hort.*
 *Mary E. Edmonds, B. S., *Dom. Sci.*
 *E. O. Edson, B. S., *Instr. Poultry.*
 *W. E. J. Edwards, B. S., *Instr. An. Husb.*
 *†H. J. Eustace, M. H., *Hort. Vice Dir. of Sta.*
 *D. T. Ewing, M. S., (*Asst.*) *Chem.*
 *F. W. Fabian, B. S., *Instr. Bact.*
 *E. C. Foreman, B. S., *Instr. Poultry.*
 *D. H. Flower, *Instr. Farm Engin.*
 †V. A. Freeman, B. S., *Specialist in Sheep Husb.*
 *B. E. L. French, B. S., *Instr. Chem.*
 *W. H. French, M. Pd., M. S., *Agr. Ed.*
 *†T. E. Friedemann, B. S., *Instr. Chem.; Asst. Chem.*
 *Edna M. Garvin, B. S., *Instr. Home Econ.*
 *H. A. Geauque, M. S., *Instr. Chem.*
 *W. I. Gilson, M. F., (*Asst.*) *For.*
 *†Ward Giltner, D. V. M., M. S., *Bact. and Hyg.; Bact.*
 *G. M. Grantham, B. S., *Instr. Soils.*
 †C. H. Graves, B. S., *Farm Mgt. Dem.*
 *E. L. Grover, B. S., (*Asst.*) *Agr. Ed.*
 *Thomas Gunson, (*Asst.*) *Hort., Supt. of Grounds.*
 *F. A. Hagedorn, B. S., *Instr. Dairy Mfrs.*
 *†C. P. Halligan, B. S., (*Assoc.*) *Hort.; Assoc. Hort.*
 *E. T. Hallman, D. V. M., (*Assoc.*) *An. Path.*
 *B. E. Hartsuch, A. B., (*Asst.*) *Chem.*
 †F. F. Hebard, B. S., *Insp. Fert. and Feeds.*
 *W. O. Hedrick, Ph. D., *Rural Econ.*
 *†R. P. Hibbard, Ph. D., *Instr. Plant Path.; Research Assoc. Plant Path.*
 *Bertha M. Hollister, B. A., *Seed Analyst.*
 †B. W. Housholder, B. S., *Supt. Upper Peninsula Substa., Chatham.*
 †I. F. Huddleson, B. S., *Research Asst. Bact.*
 *R. S. Hudson, B. S., *Supt. Farm.*
 *R. C. Huston, Ph. D., (*Assoc.*) *Chem.*
 *J. P. Hutton, D. V. M., (*Assoc.*) *Surg., Clinics.*
 *H. E. Johnson, D. V. M., *Instr. Vet. Anat.*
 †Margaret, M. Justin, B. S., *Home Econ. Specialist.*
 *Ruth Kellogg, B. S., *Instr. Dom. Sci.*
 *B. F. Kindig, *Instr. Bee Keeping.*
 *†Mrs. Linda E. Landon, *Libr.*
 †W. A. Laudemann, A. M., *Research Asst. in Soils.*
 *W. E. Laycock, A. B., *Instr. Phys.*
 *V. E. LeRoy, M. S., *Instr. Zool.*
 †Ezra Levin, B. S., *Muck Crop Work.*
 †E. C. Lindemann, B. S., *Dir. Boys' and Girls' Clubs.*
 *R. E. Lorce, B. S., *Instr. Hort.*
 *R. P. Lyman, B. S., M. D. V., *Vet Med., Dean Vet. Med.*
 †A. C. Lytle, B. S., *Asst. in Dairying.*
 †J. N. McBride, B. S., *Dir. of Markets.*
 *†M. M. McCool, Ph. D., *Soils; Soil Physicist.*
 *†Eugenia I. McDaniel, A. B., *Instr. Ent.; Research Asst. Ent.*
 †K. H. McDonel, B. S., *Supervisor Ext. Schools.*
 †E. C. Mandenberg, B. S., *Specialist in For.*
 *C. E. Millar, M. S., (*Asst.*) *Soils.*
 †E. J. Miller, M. S., *Research Asst. Chem.*
 †J. F. Morgan,¹ M. A., *Research Asst. Bact.*
 †Clara K. Morris, B. S., *Asst. in Home Econ.*
 †Eben Mumford, Ph. D., *State Leader of County Agts.*
 †William Murphy, B. S., *Specialist in Farm Crops.*
 *†H. H. Musselman, B. S., (*Assoc.*) *Farm Mech.; Assoc. in charge Farm Mech.*
 *H. W. F. Newhall, B. S., (*Assoc.*) *Dairy Husb.*
 †J. W. Nicholson, B. S., *Farm Crops Specialist.*
 *†C. G. Nobles, B. S., *Instr. Bact.; Research Asst. in Bact.*
 *†L. Zac Northrop, A. M., M. H. E., (*Asst.*) *Bact. and Hyg.; Asst. Bact.*
 †Elizabeth Parker, R. N., *Specialist in Home Econ.*
 †A. J. Patten, B. S., *Chem.*
 *Mrs. Lillian L. Peppard, (*Assoc.*) *Dom. Art.*
 †May M. Person, A. M., *Specialist in Home Econ.*
 †R. W. Peterson, B. S., *Asst. Hort.*
 *†R. H. Pettit, B. S. A., *Ent.*
 *H. L. Publow, B. S., *Instr. Chem.*
 *Allison Ransford, *Instr. Cheese Making.*
 †F. T. Riddell, B. S., *Asst. Dairy Husb.*
 *C. N. Rix, *Instr. Farm Mech.*
 †O. E. Robey, B. S., *Household Engin. Specialist.*
 †C. S. Robinson, Ph. D., *Research Assoc. Chem.*
 *B. B. Roseboom, jr., B. S., (*Asst.*) *Physiol.*
 *F. H. Sanford, M. F., (*Assoc.*) *For.*
 *D. A. Seeley, B. S., *Instr. Mct.*
 *Grace F. Smiley, B. S., *Instr. Dom. Art.*
 †Edna V. Smith, B. S., *Asst. in Home Econ.*
 *O. L. Snow, B. S., *Instr. Phys.*
 *J. L. Snyder, Ph. D., LL. D., *Pres. Emeritus.*
 †C. A. Spaulding, B. S., *Asst. in Boys' and Girls' Club Work.*
 *†F. A. Spragg, M. S., *Instr. Farm Crops; Research Assoc. in Plant Brdg.*
 *C. H. Spurway, M. Agr., (*Asst.*) *Soils.*
 *J. W. Stack, B. S., *Instr. Zool.*

¹ On leave.

- *†H. J. Stafseth, B. S., D. V. M., *Instr. Bact.; Research Asst. Bact.*
- *Florence Stoll, B. S., *Instr. Dom. Art.*
- ‡L. R. Taft, M. S., *Insp. Orchards.*
- *Rose M. Taylor, M. A., *Instr. Bot.*
- *Bertha E. Thompson, M. A., *Instr. Bot.*
- *Samuel Toms, *Asst. in Farm Mch.*
- ‡C. W. Waid, B. S., *Veg. Specialist.*
- ‡J. A. Waldron, B. S., *Specialist in Live Stock.*
- ‡J. W. Weston, B. S., *Asst. to State Leader.*

- *‡D. B. Whelan, M. S., *Instr. Ent.; Specialist in Control of Insect Pests.*
- *Georgia L. White, Ph. D., *Dean Home Econ.*
- *†P. B. Wiltberger, M. S., *Instr. Ent.; Asst. Ent.*
- †O. B. Winter, A. B., *Research Asst. Chem.*
- *W. P. Wood, M. S., (*Asst.*) *Chem.*
- *E. F. Woodcock, Ph. D., (*Asst.*) *Bot.*
- *R. W. Wyant,¹ B. S., *Instr. Dairy Mfrs.*
- *H. C. Young, M. S., *Instr. Bot.*

MINNESOTA.

Department of Agriculture (College of Agriculture, Forestry, and Home Economics, the School of Agriculture, and the Agricultural Experiment Station) of the University of Minnesota, University Farm, St. Paul.

*College faculty. †Station staff. ‡Extension staff.

- *M. L. Burton, Ph. D., D. D., LL. D., *President of University.*
- *†R. W. Thatcher, M. A., *Dean Dept. of Agr. Dir. of Sta.*
- ‡A. D. Wilson, B. S. in Agr., *Dir. of Ext. and Farmers' Insts.*

- *†J. H. Allison, Ph. B., M. F., *For.; Asst. For.*
- *†F. J. Alway, Ph. D., *Soil Chem., Chief Div. of Soils.*
- *J. A. Anderson, B. S., *Instr. Hort. (Morris).*
- *P. A. Anderson, B. S. in A., *Instr. in charge of Meat Section.*
- *†A. C. Arny, B. S. in A., (*Assoc.*) *Agron.; Asst. Agron.*
- *†R. C. Ashby, M. S., (*Asst.*) *An. Husb.; Asst. An. Husb.*
- *†C. H. Bailey, M. S., (*Assoc.*) *Agr. Biochem.; Assoc. Agr. Biochem. in charge Cereal Tech.*
- ‡G. J. Baker, M. S. in A., *Dem. Farm Expert.*
- ‡Margaret B. Baker, *Home Econ. Specialist.*
- ‡F. E. Balmer, B. S. A., *State Leader of County Agts.*
- *P. B. Barker, A. M., (*Asst.*) *Agr. Ed.*
- *†L. B. Bassett, (*Asst.*) *Farm Mgt.; Asst. Farm Mgt.*
- *†A. H. Benton, M. S., (*Asst.*) *Farm Mgt.; Farm Mgt. Invest.*
- †O. I. Bergh, B. S. in A., *Supt. Grand Rapids Substa.*
- *Josephine T. Berry,¹ M. A., *Home Econ., Nutr.*
- *Alice M. Biester, M. A., (*Asst.*) *Nutr.*
- †W. A. Billings, D. V. M., *Asst. Path.*
- *†P. C. Bing, M. A., (*Asst.*) *Journalism. Asst. Editor.*
- *†G. R. Bisby, B. S., *Instr. Plant Path.; Asst. Path.*
- *†Andrew Boss, *Agron., Chief Div. Agron. and Farm Mgt. Vice Dir. of Sta.*
- *†W. L. Boyd, D. V. S., (*Asst.*) *Vet. Med.; Asst. Vet.*
- *†W. G. Brierley, M. S., (*Assoc.*) *Hort.; Assoc. Pomol.*

- *Carlotta Brown, *Instr. Millinery.*
- *Clara Brown, A. B., *Instr. Textiles, Clothing.*
- *†C. E. Brown, (*Asst.*) *Poultry; Poultryman (Crookston).*
- ‡F. J. Brown, B. S., *Farm Mgt. Dem.*
- *†C. P. Bull, B. S., *Agron.; Assoc. Agron.*
- ‡Mary L. Bull, *Home Econ. Specialist.*
- *†LeRoy Cady, B. S., (*Assoc.*) *Hort.; Assoc. Hort.*
- ‡W. L. Cavert, M. S., *Farm Mgt. Dem.*
- ‡N. E. Chapman, M. A., *Ext. Lect. on Poultry.*
- *I. D. Charlton, B. S., *Farm Engin., Chief Div. Farm Engin.*
- *†E. G. Cheyney, B. A., *For.*
- *A. M. Christensen, B. S., *Instr. Farm Crops (Crookston).*
- ‡S. B. Cleland, B. S., *Asst. State Leader of County Agts.*
- *E. B. Cleworth, *Instr. Agr. Engin.*
- *Pauline M. Colville, *Instr. Foods and Cookery.*
- ‡Lucy Cordiner, M. S., *Specialist in Home Econ.*
- *E. C. Crane,¹ M. E. M., *Instr. Agr. Engin.*
- ‡Josephine Creelman, *Specialist in Home Nursing.*
- †V. C. Crowl, *Asst. Chem. in An. Nutr.*
- *†W. W. Cumberland, Ph. D., *Agr. Econ., Chief Div. of Research in Agr. Econ.*
- *†R. C. Dahlberg, B. S., *Instr. Agr. Bot.; Seed Analyst.*
- *F. P. Daniels, B. S., *Instr. Hort.*
- *†William Dietrich, M. S., (*Asst.*) *An. Husb.; An. Husb. (Crookston).*
- *Jean M. Dorsey, B. S., *Instr. Home Mgt.*
- *†M. J. Dorsey, Ph. D., (*Assoc.*) *Hort.; Fruit Brdg.*
- ‡J. M. Drew, *Asst. in Ext. Work.*
- *†R. A. Dutcher, M. A., (*Asst.*) *Agr. Biochem.; Asst. Chem.*

- *Alice L. Edwards, M. S., (Asst.) *Nutr. in Home Econ.*
- †T. A. Erickson, B. A., *State Club Leader.*
- †Agnes Erickson, Asst. Chem. (*An Nutr. Invest.*).
- *A. L. Ewing, M. S., *Instr. Phys.*
- *A. M. Field, M. S., (Asst.) *Agr. Ed.*
- *Hally J. Fisher, *Instr. Home Nursing.*
- *C. P. Fitch, M. S., D. V. M., *An. Path., Bact.; An. Path.*
- *A. M. Folker, (Asst.) *Farm Engin., Supt. of Bldgs. (Crookston).*
- *†L. V. France, M. S., *Instr. Bee Keeping; Asst. Apiculturist.*
- *†E. M. Freeman, Ph. D., *Chief Div. of Bot., Plant Path. Dean of College.*
- *†C. W. Gay, B. S., D. V. M., *An. Husb., Chair. An. Indus. Group.*
- *Cora Glere, Asst. in *Agr. Ed.*
- *B. M. Gile, B. A., *Instr. Agr. Ed.*
- *Alice E. Glise, *Instr. Home Econ. (Crookston).*
- *†R. A. Gortner, Ph. D., *Agr. Biochem. Chief Div. of Agr. Biochem.*
- †S. A. Graham, M. F., *Asst. in Ent.*
- †A. S. Grant, B. S., *Lab. Asst. in Plant Path.*
- †A. M. Gurjar, M. S., *Asst. in Cereal Invest.*
- *†T. L. Haecker, *An. Nutr.*
- †Mildreth J. Haggard, B. A., *Chem. (An. Nutr. Invest.).*
- *†E. O. Hanson, *Instr. Dairy Husb.; Asst. Dairy Husb.*
- †Charles Haralson, *Supt. Fruit Farm (Excelsior).*
- *Irma Hathorn, B. A., *Instr. Household Art (Morris).*
- *†H. K. Hayes, M. S., (Assoc.) *Plant Brgd.; Assoc. Agron.*
- *†B. C. Helmick, M. S., (Asst.) *Agron.; Asst. Agron.*
- *†G. R. Hoerner, B. S., *Instr. Plant Path.; Asst. in Plant Path.*
- †G. E. Holm,¹ M. S., *Research Asst. in Agr. Biochem.*
- †A. B. Hostetter, B. S., *Supervisor County Agts. (Duluth).*
- †Albert Hoversten, *Supt. SE. Dem. Farm and Substa., Waseca.*
- †G. F. Howard, *Rural School Specialist.*
- *Florence Hulett, R. N., *Instr. Home Nursing (Morris).*
- *†Francis Jager, *Apiculture.*
- *A. D. Johnston, *Instr. Agr. Engin.*
- *†P. S. Jordan, B. S. in A., *Instr. An. Husb.; Asst. An. Husb. (Morris).*
- †W. H. Kenety, M. S., *Asst. For. and Supt. Forest Sta., Cloquet.*
- *†Cornelia Kennedy, M. S., *Instr. Agr. Chem.; Asst. Agr. Chem.*
- *†H. C. Kernkamp, D. V. M., (Asst.) *Vet. Sci.; Asst. Vet.*
- *†H. H. Kildee, M. S., *Dairy Husb.*
- *†W. P. Kirkwood, B. A., (Assoc.) *Journalism. Editor.*
- *D. J. Lane, *Instr. Poultry Husb.*
- †Elizabeth Lang, B. A., *State Leader of Home Econ.*
- *†A. H. Larson, B. S., *Instr. Agr. Bot.; Asst. Seed Analyst.*
- †M. S. Larson, M. D., *Consult. An. Path.*
- †J. G. Leach, B. S., *Research Asst. in Plant Path.*
- *Georgina Lommen, *Instr. Agr. Ed.*
- *C. B. Lord, D. V. M., *Asst. in Vet. Sci.*
- *†T. M. McCall, B. S. in H., (Asst.) *Hort.; Hort. (Crookston).*
- †T. B. McCulloch, *Dem. Farm Expert.*
- *Mabel McDowell, B. S., *Instr. Foods-Mgt.*
- †Alice McFeely, *Asst. Editor.*
- *Anna E. McGahan, *Instr. Clothing.*
- *†A. J. McGuire, B. S. A., (Assoc.) *Agr., Live Stock Specialist.*
- †W. A. McKerrow, *Ext. Specialist.*
- †G. G. McKnight, B. S., *Lab. Asst. in Plant Path.*
- *†P. R. McMiller, M. S., *Instr. Soils; Asst. Chem.*
- *Olive B. MacComber, *Instr. Dom. Art.*
- *†F. Jean MacInnes, B. S., *Instr. Plant Path.; Mycol.*
- †R. S. Mackintosh, B. Agr., M. S., *Specialist in Hort.*
- *D. D. Mayne, *Agr. Pedag., Practicums. Prin. School Agr.*
- *Maud Miller, B. S., *Instr. Foods and Cookery.*
- *†P. E. Miller, B. S., *Supt. West Central Sch. of Agr. and Substa., Morris.*
- *†J. S. Montgomery, B. S. in A., (Asst.) *An. Husb.; Asst. An. Husb.*
- *†William Moore, B. A., (Assoc.) *Ent.; Assoc. Ent.*
- *Martha B. Moorhead, M. D., *Lect. on Dom. Hyg.*
- *†C. A. Morrow, M. A., (Asst.) *Agr. Biochem.; Asst. Chem.*
- *Amy P. Morse, B. A., *Instr. Textiles, Clothing.*
- *†J. M. Mowry, M. Di., (Assoc.) *Agr. Engin.; Assoc. Agr. Engin.*
- *†G. H. Nesom, B. S., *Instr. Soil Chem., Soil Chem. Specialist.*
- *Harriet E. Niles, *Instr. Textiles.*
- *†T. E. Odland, B. S., *Instr. Agron.; Asst. Agron. (Morris).*
- †R. E. Olmstead, *Farmers' Club Specialist.*
- *†P. J. Olson, M. S., (Asst.) *Agron.; Asst. Agron.*
- *†W. L. Oswald,¹ (Asst.) *Agr. Bot.; Asst. Bot., Plant Path.*
- *Stella Palmer, (Asst.) *Foods and Cookery.*
- *†T. G. Paterson, B. S. in A., (Asst.) *An. Husb.; Asst. An. Husb.*
- †C. D. Patterson, *Asst. in Farm Mgt. Dem.*

¹ On leave.

- *†F. W. Peck, M. S. in A., (Asst.) *Farm Mgt.*; *Asst. Agr. (Coop. U. S. D. A.)*
- *Ethel L. Phelps, B. S., *Instr. Textiles, Clothing.*
- *G. A. Pond, *Instr. Farm Mgt.*
- *†M. H. Reynolds, B. S., D. V. M., M. D., *Vet. Med., Surg.*
- *†W. A. Riley, Ph. D., *Ent. and Chief Div. of Ent. and Econ. Zool.*
- †Frank Robotka, B. S., *Asst. in Agr. Econ.*
- *Hazel Rockwood, B. S., *Instr. Home Econ. (Crookston).*
- *H. B. Roe, B. S., *Asst. Agr. Engin.*
- *Ethel Ronzone, M. A., (Asst.) *Textiles, Clothing.*
- †C. O. Rost, M. A., *Asst. Soil Chem.*
- †E. G. Roth, M. S., *Asst. in Soils.*
- *†A. G. Ruggles, M. A., (Assoc.) *Ent.; Ent. (State Ent.).*
- *P. Schweickard, *Instr. Rural Social Sci. (Morris).*
- *H. R. Searles, B. S., *Instr. Dairy Prod.*
- †May Seerest, B. S., *Specialist in Home Econ.*
- *†C. G. Selvig, M. A., *Supt. NW. School of Agr. and Substa., Crookston.*
- *†Harriet W. Sewall, B. A., *Libr.*
- †Juniata L. Shepperd, M. A., *Home Econ. Specialist.*
- *†A. C. Smith, B. S., *Poultry Husb.*
- †D. O. Spriestersbach, M. S., *Research Asst. in Agr. Chem.*
- *†E. C. Stakman, Ph. D., (Assoc.) *Plant Path.; Assoc. Plant Path., Bact.*
- *†J. T. Stewart,¹ C. E., *Agr. Engin.*
- *A. V. Storm, Ph. B., M. A., *Agr. Ed. and Dir. of Short Courses.*
- †M. J. Thompson, B. S. A., M. S., *Supt. NE. Dcm. Farm and Substa., Duluth.*
- †A. G. Tolaas, M. S., *Specialist in Plant Path.*
- *J. B. Torrance, *Instr. Agr. Engin.*
- †W. D. Valleau, Ph. D., *Research Asst. in Hort.*
- *Elizabeth Vermilye, B. S., *Instr. Foods-Mgt.*
- *Frances V. Ward, (Asst.) *Foods and Cookery.*
- *†F. L. Washburn, M. A., *Vertebrate Zool.*
- *†R. M. Washburn, M. S. A., *Dairy Husb.; Assoc. Dairy Husb.*
- *†Earl Weaver, M. S., (Asst.) *Dairy Husb.; Asst. Dairy Husb.*
- *Mildred Weigley, B. S., (Asst.) *Foods, Cookery (Actg. Head Dept. of Home Econ.).*
- †C. H. Welch, *Sec. Farmers' Insts.*
- *Marion Weller, B. A., (Asst.) *Home Econ.*
- *†Richard Wellington, M. S., (Asst.) *Pomol.; Pomol.*
- *†J. P. Wentling, M. A., (Assoc.) *For.; Assoc. For.*
- *†R. M. West, B. A., *Sec. Dept. of Agr.*
- *R. O. Westling, B. S., (Asst.) *Agron. (Crookston).*
- *H. B. White, B. S. in A., *Asst. Farm Mech.*
- *L. R. Whitson, E. M., *Instr. Agr. Engin.*
- *†G. H. Wiggin, B. S., *Instr. For.; Asst. Supt. Cloquet Sta.*
- *Susan Wilder, B. S. in H. E., *Instr. Dom. Art (Morris).*
- †S. D. Wilkins, *Special Analyst in Biochem.*
- *†J. J. Willaman, M. S., (Asst.) *Agr. Analysis; Asst. Chem.*
- *Grace I. Williams,¹ B. S., (Asst.) *Foods, Cookery.*
- *†Warren Williamson, M. A., *Instr. Ent.; Asst. Ent.*
- *†L. V. Wilson, B. S., *Asst. in Dairy Foods.*
- *Arthur Woodman, B. S. in C. E., *Instr. Agr. Engin. (Morris).*

MISSISSIPPI.

Mississippi Agricultural and Mechanical College and Agricultural Experiment Station, Agricultural College; the Delta Branch Station, Stoneville; the Holly Springs Branch Station, Holly Springs; and the McNeill Branch Station, McNeill.

*College faculty. †Station staff. ‡Extension staff.

*W. H. Smith, B. S., LL. D., *President.*

†‡E. R. Lloyd, M. S., *Dir. of Stations. Dir. of Ext. Work.*

- †C. T. Ames, B. S., *Asst. Dir., Holly Springs Sta.*
- *G. F. Arnold, B. S., *Instr. Zool., Ent.*
- *E. Barnett, V. M. D., *An. Husb.*
- *†J. M. Beal, M. S., *Bot., For.; Bot.*
- *†C. F. Briscoe, Ph. D., *Bact.*
- *T. J. Brooks, *Markets, Rural Econ.*
- †H. B. Brown, Ph. D., *Plant Breeder.*
- †I. W. Carpenter, B. S., *An. Husb. Specialist.*
- *†E. P. Clayton, *Poultry Husb.*
- †G. S. Clelland, B. S., *Asst. An. Husb. (Detailed by U. S. D. A. Canton.)*
- †C. A. Cobb, B. S., *in charge Boys' Clubs.*
- *T. W. Davis, M. S., *Libr.*
- ‡S. B. Durham, B. S., *Asst. in Dairying (Detailed by U. S. D. A.).*
- ‡L. S. Edwards, *Asst. in Dairying (Detailed by U. S. D. A.).*
- †B. V. Evans, *Farm Foreman, McNeill.*
- †E. B. Ferris, B. S., *Asst. Dir., McNeill Sta.*
- †H. K. Gayle, B. S., *An. Husb.*
- *F. J. Gray, B. S., *Asst. Chem.*
- *Marvin Gieger, M. S., *Instr. Chem.*
- †S. W. Greene, B. S., *Asst. An. Husb. (Detailed by U. S. D. A. Collins).*

¹On leave.

- †E. R. Gross, B. S., *Specialist in Agr. Engin.*
 *†W. F. Hand, Ph. D., *Chem. (State Chem.)*.
 *†H. H. Harned, M. S., (*Asst.*) *Bact.; Asst. Bact.*
 *†R. W. Harned, B. S., *Zool., Ent.; Ent. (State Ent.)*.
 †L. G. Herron, B. S., *Hort. Specialist*.
 †L. A. Higgins, B. S., *Dairyman (Detailed by U. S. D. A.)*.
 †H. L. Hopper, *Asst. in Boys' Club Work*.
 *†W. J. Jennings, *Sec., Treas.*
 †F. R. Jones, B. S., *Specialist in Farm Mach.*
 †I. B. Kerlin, B. S., *Asst. in Boys' Club Work*.
 †J. P. La Master, B. S., *Asst. in Dairying (Detailed by U. S. D. A.)*.
 *†R. N. Lobdell, M. S., *Asst. Ent.*
 †J. S. McBee, B. S., *Farm Foreman, Holly Springs*.
 †D. W. McIlwain, *Farm Supt.*
 *†A. B. McKay, M. S., *Hort.*
 †J. F. McKay, B. S., *Market Specialist*.
 *J. C. McKee, *Instr. Bot., For.*
 *H. D. McMurtry, B. S., (*Asst.*) *Phys.*
 *C. B. Mitchell, M. D., *Hyg., Sanitation*.
 *S. A. Montgomery, *Instr. Chem.*
 *H. W. Moody, Ph. D., *Phys.*
 *†J. S. Moore, M. S., *Dairy Husb.*
 †H. M. Parker, B. S., *An. Husb. Specialist (Detailed by U. S. D. A.)*.

- *†H. O. Pate, M. S., *Farm Mgt.*
 †R. H. Pate, B. S., *Movable Schools*.
 †T. M. Patterson, M. S., *Community Organization Specialist*.
 †Susie V. Powell, *State Agent, Home Econ.*
 *†E. M. Ranck, V. M. D., *Vet. Med.; Vet. (State Vet.)*.
 †M. D. Reed, B. S., *Farm Foreman, Stoneville*.
 †Maude B. Reeves, B. S., *Home Econ. Specialist*.
 †J. R. Ricks, M. S., *Agron. Vice Dir. of Sta.*
 *J. C. Robert, V. M. D., M. D., M. S., *Agron. Dir. School of Agr.*
 †P. H. Sanders, B. S., *Asst. in charge Pig Clubs*.
 *†Daniels Scoates, B. S. (C. E., A. E.), *Agr. Engin.*
 †J. E. Sides, *Asst. in Boys' Club Work*.
 *H. J. Smith, Ph. D., (*Assoc.*) *Chem.*
 *G. G. Snow, M. S., (*Asst.*) *Agron.*
 *H. Solomon, B. S., *Instr. Chem.*
 †P. E. Spinks, B. S., *Asst. in Boys' Club Work*.
 †Lula Tunison, A. B., *Poultry Specialist*.
 *B. M. Walker, Ph. D., *Vice Pres.*
 †G. B. Walker, B. S., *Asst. Dir., Delta Sta., Stoneville*.
 *J. T. West, B. S., *Assoc. Agron.*
 †R. S. Wilson, B. S., *Asst. Dir. Ext. Work, State Agent, Coop. Dem. Work*.

Alcorn Agricultural and Mechanical College, Alcorn.

*College faculty.

*L. J. Rowan, Ph. D., *President*.

- *R. A. Gordon, B. S., M. D., *Phys., Chem.*
 *G. W. Irwin, *Dairying*.
 *Selma C. Jackson, *Nurse Training*.
 *Miss T. L. Kemper, *Houskeeping*.
 *Alice G. Laws, *Instr. Sewing*.
 *L. J. McKay, B. S., (*Asst.*) *Agr.*

- *Mrs. Sadie H. Miller, *Instr. Home Econ.*
 *W. S. Nelson, *Laundry*.
 *F. J. Norwood, B. S., *Agr., Farm Supt.*
 *A. E. Perkins, Ph. D., *Biol. Sci.*
 *H. T. Tanner, *Hort. and Canning*.

MISSOURI.

College of Agriculture and the Agricultural Experiment Station of the University of Missouri, Columbia.

*College faculty. †Station staff. ‡Extension staff.

- *A. R. Hill, Ph. D., LL. D., *President of University*.
 *†F. B. Mumford, M. S., *Dean Coll. of Agr. Dir. of Sta. An. Husb. (*†)*
 †A. J. Meyer, B. S. A., *Dir. Agr. Ext. Service*.

- *†W. A. Albrecht, M. S., *Instr. Soils; Asst. in Soils*.
 †L. L. Alexander, B. S., *Ext. Asst. in Farm Crops*.
 *†H. O. Allison, M. S., (*Assoc.*) *An. Husb.; An. Husb.*
 *†J. G. Babb, M. A., *Sec.*
 *†L. S. Backus, D. V. M., (*Asst.*) *Vet. Sci.; Vet.*
 †W. H. Baker, B. S., *Asst. in Agr. Ext.*

- †J. F. Barham, *Photog.*
 *††M. N. Beeler, B. J., B. S., *Agr. Editor*.
 †Mary M. Bell, B. S., (*Ext. Asst.*) *Home Econ.*
 *E. B. Branson, Ph. D., *Geol.*
 *W. G. Brown, Ph. D., *Tech. Chem.*
 *T. P. Burroughs, A. B., *Asst. in Zool.*
 †F. W. Caldwell, D. V. M., (*Ext. Asst.*) *Vet. Sci.*
 *Sidney Calvert, A. M., *Org. Chem.*

- *Florence Caton, B. S., *Asst. in Home Econ.*
 †L. F. Childers, M. S. A., (*Ext. Assoc.*) *Soils.*
 *†J. W. Connaway, D. V. S., M. D., *Vet. and Comp. Med.; Vet.*
 †O. S. Crisler, D. V. M., *Supt. Serum Prod.*
 *W. C. Curtis, Ph. D., *Zool.*
 *A. L. Davis, A. B., *Asst. in Chem.*
 *G. S. Dodds, Ph. D., (*Asst.*) *Zool.*
 *Mary V. Dover, Ph. D., *Instr. Chem.*
 *†F. L. Duley, A. M., *Instr. Soils; Asst. in Soils.*
 *†Frederick Dunlap, F. E., *For.*
 *E. J. Durand, D. Sc., (*Assoc.*) *Bot.*
 *†A. J. Durant, A. M., *Instr. Vet. Sci.; Asst. in Vet. Sci.*
 *†C. H. Eckles, D. Sc., *Dairy Husb.*
 †R. H. Emberson, B. S., *Supervisor Boys' and Girls' Clubs.*
 *†W. C. Etheridge, Ph. D., *Farm Crops.*
 †F. W. Faurot, B. S., (*Ext. Asst.*) *Hort.*
 †F. C. Fenton,¹ B. S. A. E., (*Ext. Asst.*) *Rural Engin.*
 *†M. H. Fohrman, B. S., *Asst. in Dairy Husb.*
 *J. A. Gibson,¹ A. M., (*Asst.*) *Anal. Chem.*
 *†R. M. Green, B. S., (*Asst.*) *Farm Mgt.; Asst. in Farm Mgt.*
 *D. K. Greger, *Asst. in Geol.*
 *S. D. Gromer, A. M., LL. D., (*Asst.*) *Agr. Econ.*
 *Mary Guthrie, A. B., *Asst. in Zool.*
 †Howard Hackedorn, B. S. A., (*Ext. Asst.*) *An. Husb.*
 †J. C. Hackleman, A. M., (*Ext. Asst.*) *Farm Crops.*
 *†L. D. Haigh, Ph. D., (*Asst.*) *Agr. Chem.; Agr. Chem.*
 †W. H. Hargrove, B. S., *Asst. in Agr. Ext.*
 *†Leonard Haseman, Ph. D., (*Assoc.*) *Ent.; Ent., Nursery Insp.*
 †H. A. Hays, D. V. M., (*Ext. Asst.*) *Vet. Sci., in charge Hog Cholera Work.*
 *†C. A. Helm, A. M., (*Asst.*) *Farm Crops; Asst. Agron.*
 *†G. W. Hervey,¹ B. S., *Asst. in Poultry Husb.*
 *Hope Hibbard, A. B., *Asst. in Zool.*
 *†A. H. Hollinger, M. A., *Instr. Ent.; Asst. Ent., Deputy Nursery Insp.*
 *†T. H. Hopper, A. B., *Asst. in Agr. Chem.*
 *†R. R. Hudelson,¹ A. M., (*Asst.*) *Soils; Soils.*
 *†E. H. Hughes, A. M., *Asst. to Dean and Dir. Supt. of Short Courses.*
 *G. E. M. Jauncey, A. M., *Instr. Phys.*
 *C. D. Johnson, A. B., *Asst. in Geol.*
 *†O. R. Johnson,¹ A. M., (*Assoc.*) *Farm Mgt.; Farm Mgt.*
 †E. R. Keller, B. S., *Asst. in Boys' and Girls' Club Work.*
 *†H. L. Kempster, B. S., (*Assoc.*) *Poultry Husb.; Poultry Husb.*
 †H. H. Krusekopf, A. M., *Asst. in Soil Survey.*
 *†W. H. Lawrence, M. S., *Hort.*
 *George Lefevre, Ph. D., *Zool.*
 *†E. W. Lehmann, E. E., A. E., (*Assoc.*) *Agr. Engin.; Agr. Engin.*
 *Clara L. Lhamon, A. B., *Asst. in Home Econ.*
 *†H. F. Libbey, B. S., *Asst. in Vet. Sci.*
 †E. A. Livesay, A. M., *Asst. County Agt. Leader.*
 *E. S. Longfellow, A. B., *Asst. in Chem.*
 †J. S. McDonald, B. S., D. V. M., (*Ext. Asst.*) *Vet. Sci.*
 *†E. M. McDonald,¹ B. S., (*Asst.*) *Farm Crops; Farm Crops.*
 *†H. F. Major, B. S., (*Asst.*) *Landsc. Gard. and Supt. of Grounds.*
 *W. E. Maneval, Ph. D., *Instr. Bot.*
 *†C. E. Mangels, M. S., *Instr. Agr. Chem.; Asst. Agr. Chem.*
 *J. W. Marden, D. Sc., (*Asst.*) *Chem.*
 *†M. F. Miller, M. S. A., *Soils. Asst. Dean and Dir.*
 *†L. W. Morley, B. S., *Asst. in Dairy Husb.*
 *†C. R. Moulton,¹ Ph. D., (*Asst.*) *Agr. Chem.; Agr. Chem.*
 †P. B. Naylor, B. S., *Asst. in Agr. Ext.*
 †W. L. Nelson, *Asst. in Agr. Ext.*
 *†H. G. Newman, B. S., *Asst. in Vet. Sci.*
 *Eleanor H. Newmann, B. S., *Asst. in Bot.*
 *†I. F. Nuckols, B. S., *Asst. in An. Husb.*
 *†L. S. Palmer, Ph. D., (*Asst.*) *Dairy Chem.; Asst. Chem.*
 *†E. C. Pegg, M. F., (*Asst.*) *For.; For.*
 †Sarah Pettit, B. S., *Supt. Womens' Home Dem. Work.*
 *†R. B. Price, M. S., *Treas.*
 †A. C. Ragsdale, B. S., (*Ext. Asst.*) *Dairy Husb.*
 †G. W. Reavis, *Supervisor of Boys' and Girls' Clubs.*
 *†G. M. Reed, Ph. D., *Bot.*
 †George Reeder, *Lect. on Met., Climat. Section Dir. U. S. Weather Bureau.*
 *H. M. Reese, Ph. D., (*Assoc.*) *Phys.*
 *†L. G. Rinkle, M. S. A., (*Asst.*) *Dairy Husb.; Dairy Husb.*
 *†W. S. Ritchie, B. S., *Asst. in Agr. Chem.*
 †Mary E. Robinson, B. S., *Ext. Instr. Home Econ.*
 *Amy L. Rolfe, M. A., *Instr. Home Econ.*
 †Addie D. Root, B. S., *Ext. Instr. Home Econ., Supervisor Girls' Clubs.*
 *†J. T. Rosa, jr., M. S., *Instr. Hort.; Asst. Hort.*
 †P. H. Ross, B. S., *State Leader of County Agts., Asst. Dir. Agr. Ext.*
 *Herman Schlundt, Ph. D., *Phys. Chem.*
 *Mrs. Louis Selbert, G. N., *Instr. Home Econ.*

¹ On leave.

- *H. F. Sill, Ph. D., *Instr. Chem.*
 ‡S. T. Simpson, B. S., *Agt. in An. Husb.*
 (*Coop. U. S. D. A.*).
 *†J. B. Smith,¹ M. A., *Asst. in Field Crops.*
 *M. Elizabeth Spalding, B. S. in Ed.,
Asst. in Home Econ.
 *Louise Stanley, Ph. D., (*Assoc.*) *Home Econ.*
 *O. M. Stewart, Ph. D., *Phys.*
 ‡J. T. Stinson, B. S., *Asst. in Agr. Ext.*
 †K. C. Sullivan, B. S., *Asst. in Nursery Insp.*
 *Robert Swensen, A. M., *Asst. in Phys.*
 *†W. W. Swett, A. M., *Instr. Dairy Husb.; Asst. Dairy Husb.*
 ‡T. J. Talbert,¹ B. S. A., (*Ext. Asst.*) *Ent.*
 *G. W. Tannreuther, Ph. D., *Instr. Zool.*
 *W. A. Tarr, Ph. D., (*Asst.*) *Geol.*
 *L. F. Thomas, M. A., *Instr. Geol.*

- *†C. R. Thomson, B. S., *Asst. in An. Husb.*
 ‡T. S. Townsley, B. S., *Ext. Instr. Poultry Husb.*
 *†E. A. Trowbridge, B. S. A., *An. Husb.*
 *†P. F. Trowbridge, Ph. D., *Agr. Chem.*
 *H. B. Wahlin, A. M., *Instr. Phys.*
 *P. M. Waldron, A. B., *Asst. Chem.*
 *†L. A. Weaver, B. S. A., (*Asst.*) *An. Husb.; An. Husb.*
 *Courtney Werner, A. B., *Asst. in Geol.*
 *†Percy Werner, jr.,¹ A. M., *Asst. Dairy Husb.*
 *†J. C. Whitten, Ph. D., *Hort.*
 *†C. C. Wiggins, A. M., *Instr. Hort.; Asst. Hort.*
 ‡Winona Windsor, A. B., *Ext. Asst. in Home Econ.*
 ‡D. C. Wood, B. S., (*Ext.*) *Farm Mgt. Dcm.*
 ‡F. L. Wright, *Asst. in Boys' and Girls' Club Work.*

Missouri State Fruit Experiment Station, Mountain Grove.

†Station staff.

†Paul Evans, *Director.*

- †D. H. Rose, Ph. D., *Path.*
 †A. M. Swartwout, *Asst. Hort.*

- †A. J. Umholtz, *Orchard Asst.*
 †C. M. Williams, *Field Hort.*

Lincoln Institute, Jefferson City.

*College faculty.

*B. F. Allen, A. M., LL. D., *President. Econ., Rural Pedag.*

- *D. Harriet Christburg, A. B., *Dom. Art.*
 *Myrtle Craig-Bowen, B. S., *Dom. Sci., Laundering.*
 *Helen B. Crampton, B. S., *Dom. Art.*

- *J. W. Damel, M. Ph., *Biol.*
 *S. H. Du Valle, A. B., *Chem.*
 *T. M. Hampton, *Farm Mgt., Market Gard.*
 *H. H. Harris, B. S., *Agr., Dairying.*

MONTANA.

Montana State College of Agriculture and Mechanic Arts and the Agricultural Experiment Station, Bozeman.

*College faculty. †Station staff. ‡Extension staff.

*J. M. Hamilton, M. S., *President.*

*†F. B. Linfield, B. S. A., *Dean of Agr. Dir. of Sta.*

‡F. S. Cooley, B. S., *Dir. of Ext. Service.*

- *†M. J. Abbey, A. B., *Indus. Ed., State Club Leader.*
 *†C. N. Arnett,¹ B. S., *An. Husb.*
 *†Alfred Atkinson, M. S., *Agron.*
 *Florence Ballinger, (*Asst.*) *Dom. Art.*
 ‡W. L. Beers, B. A., *Market Specialist.*
 †M. J. Blish, Ph. D., *Asst. Chem.*
 †Edmund Burke, B. S., *Chem., Mct.*
 *W. M. Cobleigh, A. M., *Chem. (State Chem.)*
 *†R. A. Cooley, B. S., *Zool., Ent. (State Ent.).*

- *†E. L. Currier, B. S., *Farm Mgt.*
 *Carlotta M. Ford, A. B., (*Asst.*) *Home Econ.*
 *Elizabeth Forrest, B. L. S., *Libr.*
 ‡F. E. Fuller, B. S., *Agron. Specialist.*
 *†L. F. Glesker, M. S., (*Asst.*) *Agron.; Asst. Agron.*
 *F. W. Ham, M. S., *Phys.*
 *Lilla A. Harkins, M. S., *Home Econ.*
 ‡W. J. Hartman, D. V. M., *Live Stock Specialist.*
 *E. C. Hytree, A. M., *Instr. Chem.*

¹ On leave.

- †E. W. Jahnke, B. S., *Supt. Grain Lab.*
 *H. M. Jennison, M. A., (Asst.) *Bot., Bact.*
 †R. S. Jones,¹ B. S., *Asst. Chem.*
 *†W. E. Joseph, Ph. D., (Asst.) *An. Husb.; Asst. An. Husb.*
 *R. C. McChord, B. S., (Asst.) *An. Husb.*
 *G. L. Martin, B. S., *Dairying.*
 †Ernest Morris,¹ *Asst. Agron.*
 †H. E. Morris, M. S., *Asst. Bot., Bact.*
 *†H. E. Murdock, C. E., M. E., (Asst.) *Farm Mech.; Agr. Engin.*
 †J. B. Nelson, *Asst. Agron.*
 †Mina Ogilvie, M. S., *Asst. Home Econ. Specialist.*
 †J. R. Parker, B. S., *Asst. Ent.*
 †R. M. Pinckney, M. A., *Asst. Chem.*
 *Lisa Osterholm, M. S., *Instr. Home Econ.*
 †C. E. Potter, *Asst. State Club Leader.*
- †E. J. Quinn, B. S., *Asst. Chem.*
 †Bess M. Rowe, B. S., *Home Econ. Specialist.*
 *†W. F. Schoppe, M. S., *Poultry Husb.; Poultryman.*
 *M. H. Spaulding, A. M., (Asst.) *Zool.*
 *†C. C. Starring, B. S., (Asst.) *Hort.; Asst. Hort.*
 *†D. B. Swingle, M. S., *Bot., Bact.*
 †J. C. Taylor, B. S., *Asst. County Agt Leader.*
 †W. E. Tomson, B. S., *Field Agt. in Dairying (Coop. U. S. D. A.).*
 *†Oscar Tretsen, *Asst. An. Husb.*
 *†Howard Welch, D. V. M., *Vet. Sci.; Vet.*
 *†O. B. Whipple, B. S., *Hort.*
 *W. O. Whitcomb, M. S., (Asst.) *Agron.*
 †M. L. Wilson, B. S., *State Leader County Agents.*

NEBRASKA.

College of Agriculture and the Agricultural Experiment Station of the University of Nebraska, Lincoln.

*College faculty. †Station staff. ‡Extension staff.

- *Samuel Avery, Ph. D., LL. D., *Chancellor of University.*
 *†E. A. Burnett,² D. Sc., *Dean Coll. of Agr. Dir. of Sta.*
 †C. W. Pugsley, B. S., *Dir. Agr. Ext. Service.*
- *Ida V. Ahrens, B. S., *Instr. Home Econ.*
 *S. W. Alford, D. V. S., (Assoc.) *An. Path.*
 *Arthur Anderson, B. S., *Instr. Crops.*
 *Emma N. Anderson, A. M., (Asst.) *Plant Path., Phys.*
 *W. E. Anderson, B. S., *Asst. in Chem.*
 *A. A. Baer, A. B., (Asst.) *Agr. Engin.*
 *N. A. Bengtson, A. M., *Geography and Conservation.*
 *Jessie Blies, A. B., *Instr. Dom. Arts.*
 *Irma Bowen, *Instr. Home Econ.*
 *E. E. Brackett,¹ B. S., (Assoc.) *Agr. Engin.*
 *H. E. Bradford, A. M., *Secun. Agr. Ed. Prin. School of Agr.*
 †Mary-Ellen Brown, B. S., *Asst. in Junior Ext. Work.*
 *†Lawrence Bruner, B. S., *Ent. (State Ent.).*
 *††W. W. Burr, B. S., *Head Agron. Dept.*
 *†J. W. Calvin,¹ B. S., (Asst.) *Agr. Chem.; Assoc. Chem.*
 *Sarah W. Canfield, A. B., *Instr. Home Econ.*
 *†L. W. Chase, M. E., A. E., *Agr. Engin.*
 †J. H. Claybaugh, B. S., *Asst. in Junior Ext. Work.*
 *G. E. Condra, Ph. D., *Head Geography and Conservation Dept.*
 *†James Cowan, M. E., *Supt. Valentine Substa.*
 *Katherine Cranor, B. S., (Asst.) *Home Econ.*
- ††R. P. Crawford, A. B., *Agr. Editor.*
 *Ruth Curtiss, B. S., *Instr. Home Econ.*
 *†J. S. Dales, M. Ph., *Financial Sec.*
 *A. R. Davis,¹ Ph. D., (Asst.) *Agr. Bot.*
 †Emma R. Davison,¹ *in charge Home Econ. Ext. Work with Women's Clubs.*
 *R. W. Dawson, B. S., (Asst.) *Ent.*
 *J. E. Fate, B. S., *Instr. Farm Mgt.*
 *Margaret S. Fedde, A. B., (Asst.) *Home Econ.*
 *††H. C. Filley, A. M., *Farm Mgt.*
 *†J. H. Frandsen, M. S., *Dairy Husb.*
 *P. L. Gaddis, B. S., (Assoc.) *Agron.*
 *†J. H. Gain, M. D. C., *An. Path.*
 †A. G. George, B. S., *Asst. Leader in Junior Ext. Work.*
 †T. H. Gooding, B. S., *Asst. in Junior Ext. Work.*
 *†H. J. Gramlich, B. S., *An. Husb.*
 †C. E. Gunnels, B. S., *County Agt. Leader.*
 †J. F. Hendricks, A. M., *Farm Mgt. Dem.*
 *R. C. Hibben,¹ B. S., *Instr. Dairy Husb.*
 †J. A. Holden, B. S., *Supt. Scottsbluff Substa., Mitchell.*
 †R. E. Holland, B. S., *Asst. County Agt. Leader.*
 *G. W. Hood, M. S., (Assoc.) *Hort.*
 †E. H. Hoppert, B. S., (Ext. Asst.) *Hort.*
 *†Erwin Hopt, B. S., *Agron. (Crops); Asst. Agron.*
 *††R. F. Howard, M. A., *Hort.*
 *E. L. Jenkins, M. S., (Asst.) *An. Husb.*

¹ On leave.² In charge of substations.

- †Ada Johnson, B. S., *Ext. Instr. Home Econ.*
 †F. D. Keim, B. S., (*Ext. Asst.*) *Agron.*
 *†T. A. Kiesselbach, A. M., *Agron.*
 *Elizabeth V. Lacey, B. S., *Instr. Home Econ.*
 *Leta B. Linch, A. B., *Instr. Home Econ.*
 *††G. K. K. Link,¹ Ph. D., *Plant Physiol.*; *Assoc. Plant Physiol.*
 †W. J. Loeffel, B. S., *Asst. in Junior Ext. Work.*
 *Alice M. Loomis,¹ A. M., *Home Econ.*
 *†G. A. Loveland, A. M., LL. B., *Met.*
 *†C. E. Mickel, B. S., *Field Ent.*, *Specialist in Ent.*
 *F. E. Musschl, B. S., *Poultry Husb.*
 *†W. B. Nevens, M. S., (*Asst.*) *Dairy Husb.*; *Asst. Dairy Husb.*
 *Edna C. Noble, B. L., *Asst. in charge Libr.*
 †Esther Ord, B. S., *Ext. Instr. Home Econ.*
 *S. W. Perin, *Farm Supt.*
 *H. M. Plum, Ph. D., *Agr. Chem.*
 *R. J. Pool, Ph. D., *Bot.*
 †D. H. Propps, B. S., (*Ext. Asst.*) *Dairy Husb.*
 †Mary A. Rokahr, A. B., *Ext. Instr. Home Econ.*
 *W. J. Runnalls, *Instructing Mechanic.*
 *L. F. Seaton, B. S. M. E., (*Assoc.*) *Agr. Engin.*

- *O. W. Sjogren, B. S. A. E., (*Asst.*) *Agr. Engin.*
 †L. T. Skinner, B. S., *Asst. Dir. Agr. Ext. Service.*
 †W. P. Snyder, M. S., *Supt. North Platte Substa.*
 *††R. R. Spafford, B. S., (*Asst.*) *Farm Mgt.*; *Asst. in Farm Mgt.*
 *†M. H. Swenk, A. M., *Econ. Ent.*
 *B. H. Thompson, B. S., *Instr. Dairy Husb.*
 *†H. W. Thurston, jr., B. S., (*Assoc.*) *Plant Physiol.*; *Assoc. Plant Physiol.*
 *†F. W. Upson, Ph. D., *Head Agr. Chem. Dept.*
 *Julia Vance, B. S., (*Assoc.*) *Home Econ.*, *Actg. Head Home Econ. Dept.*
 *†L. O. Vose,¹ B. S., *Instr. Agr. Chem.*; *Asst. Chem.*
 †K. F. Warner, M. S., (*Ext. Asst.*) *An. Husb.*
 †C. W. Watson, A. M., *Leader Junior Ext. Work.*
 *J. E. Weaver, Ph. D., *Plant Ecology.*
 *†E. M. Wilcox, Ph. D., *Plant Path. and Physiol.*, *Head Dept. of Plant Path.*
 †Maud M. Wilson, B. S., *Leader Home Econ. Agts.*
 †I. D. Wood,¹ M. S., (*Ext. Asst.*) *Agr. Engin.*
 †L. L. Zook, B. S., *Agron.* (*Detailed by U. S. D. A. North Platte*).

NEVADA.

College of Agriculture and the Agricultural Experiment Station of the University of Nevada, Reno.

*College faculty. †Station staff. ‡Extension staff.

*W. E. Clark, Ph. D., *President of University.**††C. S. Knight, B. S., *Dean Coll. of Agr. Agron.* (*††)†S. B. Doten, M. A., *Dir of Sta. Ent.*(†)†C. A. Norcross, A. B., *Dir. Agr. Ext.**†Maxwell Adams, Ph. D., *Chem.*; *Consult. Chem.**†Romanzo Adams, Ph. D., *Agr. Econ.*†J. E. Church, jr., Ph. D., *Met.*†Mrs. T. W. Cowgill, M. A., *Libr.**S. C. Dinsmore, B. S., *Comr. Food and Drugs.*†C. E. Fleming,¹ B. S., *Range Mgt.**††Peter Frandsen, A. M., *Biol.*; *Consult. Biol.*†Miss F. B. Hancock, *State Leader in Home Econ.*†George Hardman, M. S., *Asst. Agron.**L. W. Hartman, Ph. D., *Phys.*†C. A. Jacobson, Ph. D., *Chem.*†H. W. Jakeman, V. M. D., *Asst. Bact.*†Margaret M. Johnson, *State Leader in Club Work.**†C. W. Lantz, M. A., (*Asst.*) *Bot.*, *Hort.*; *Consult. Bot.*, *Hort.**Robert Lewers, *Vice Pres.*††Stephen Lockett, V. M. D., *Asst. Vet.*, *Field Agt. in An. Diseases.**Margaret E. Mack, A. M., (*Asst.*) *Biol.*†Minnie Meskimmmons, *Asst. Club Leader.**Zilla E. Mills, B. S., *Instr. Home Econ.*†N. F. Petersen, M. A., *Asst. in Range Mgt.*†Edward Records, V. M. D., *Head Dept. Vet. Sci.* (*Dir. State Vet. Control Service*).†Elsie Sameth, *Specialist in Phys. Culture.*†V. E. Scott, B. S., *Dairy Husb.* (*Coop. U. S. D. A.*)*G. W. Sears, Ph. D., *Instr. Chem.**Millicent Sears, *Home Econ.**††F. W. Wilson, M. S., *An. Husb.*; *Consult. An. Husb.*†L. H. Wright, D. V. M., *Asst. Vet.*¹ On leave.

NEW HAMPSHIRE.

New Hampshire College of Agriculture and the Mechanic Arts and the Agricultural Experiment Station, Durham.

*College faculty. †Station staff. ‡Extension staff.

*R. D. Hetzel, A. B., LL. B., *President*.†‡J. C. Kendall, B. S., *Dir. of Sta. Dir. Ext. Work*.†A. J. Ballard, *Asst. in Girls' Club Work*.*R. J. Bean, M. S., *Asst. in Zool.*†L. F. Brown, B. S., *Asst. Agt. in Dairying*.*†O. R. Butler, Ph. D., *Bot.*†L. A. Carlisle, B. S., *State Leader in Boys' Club Work*.*C. R. Cleveland, A. B., *Asst. Econ. Ent.*†B. E. Curry, A. B., *Chem.*†W. P. Davis, *Agt. in Dairying*.*H. F. DePew, B. S., *Asst. in Dairying*.*O. L. Eckman, B. S., *An. Husb.**†Martha F. Emerson, *Libr.**C. J. Fawcett, B. S., *Instr. An. Husb.**C. R. Fischer, B. S., *Instr. Chem.**†J. M. Fuller, B. S., *Dairying*.*†J. H. Gourley, M. S., *Hort.**†J. R. Hepler, B. S., (*Asst.*) *Hort.; Asst. in Oler.**C. F. Jackson, M. A., *Zool., Ent.**Charles James, F. I. C., *Chem.**Helen Knowlton, A. B., *Home Econ.**K. B. Laird, B. S., *Instr. Bot.*†H. B. Little, B. S., *Asst. in Boys' Club Work*.†Albert Littlehale, *Shepherd*.*Arabella S. Livingston, B. S., *Asst. in Home Econ.**†Edward Long, B. S., *Asst. in For.**†James Macfarlane, *Florist*.†Elizabeth E. Mehaffey, *Asst. Libr.**Clement Moran, A. B., *Instr. Phys.*†H. A. Mostrom, B. S., *Asst. in Boys' Club Work*.*†W. C. O'Kane, M. A., *Econ. Ent.; Ent.**G. A. Perley, M. S., (*Assoc.*) *Phys. Chem.**C. A. Pettee, C. E., LL. D., *Dean of College*.*†F. S. Prince, B. S., (*Asst.*) *Agron.; Asst. Agron.**Frieda Reiner, B. S., (*Asst.*) *Home Econ.**A. W. Richardson, B. S., (*Asst.*) *in charge Poultry Husb.*†E. G. Ritzman, B. S. A., *An. Husb.*†Mary L. Sanborn, *State Leader of Girls' Clubs*.†T. O. Smith, M. S., *Asst. Chem.**O. J. Stewart, M. S., (*Asst.*) *Chem.**C. W. Stone, A. M., *Supt. of Farm*.*V. A. Suydam, Ph. D., *Phys.*†R. F. Taber, B. S., *Farm Mgt. Dem.**†F. W. Taylor, B. S., *Agron. Dean of Agr.*†Bertha E. Tittsworth, B. S., *State Home Dem. Leader*.†M. C. Wilson, B. S., *State Leader of County Agts*.*†W. H. Wolff, M. S., (*Assoc.*) *Pomol.; Asst. Hort.**†K. W. Woodward, M. F., *For.*†Mary A. Worcester, B. S., *Asst. in Girls' Club Work*.*†H. P. Young, B. S., *Instr. Agron.; Asst. Agron.*

NEW JERSEY.

State College of Agriculture and Mechanic Arts, and the Agricultural Experiment Station of Rutgers College (the State University of New Jersey), New Brunswick.

*College faculty. †Station staff. ‡Extension staff.

*W. H. S. Demarest, A. M., D. D., LL. D., *President*.*†J. G. Lipman, Ph. D., *Dir. of Sta. Dean of Agr. Soil Fert., Bact. (*) Soil Chem., Bact. (†)**†Alva Agee, M. S., *Dir. Div. of Ext. in Agr. and Home Econ.**V. G. Anderson, Ph. D., *Lect. in Hyg.**Frank App, B. S., (*Asst.*) *Agron.*†V. G. Aubry, B. S., *Specialist in Poultry Husb.**O. L. Barnehey, Ph. D., (*Assoc.*) *Chem.*†J. W. Bartlett, B. S., *Specialist in Dairy Husb.**†A. W. Blair, A. M., (*Assoc.*) *Agr. Chem.; Assoc. Soil Chem., Bact.**M. A. Blake, B. S., *Hort.**F. E. Chidester, Ph. D., *Zool.**W. B. Combs, A. M., *Instr. Dairy Husb.**†M. T. Cook, Ph. D., *Plant Path.*†R. E. Curtis, B. S., *Research Asst. in Soil Bact.**R. E. Danforth, A. B., *Asst. in Zool.*†R. W. DeBaun, B. S., *Specialist in Market Gard.**A. C. de Regt, M. S., (*Assoc.*) *Chem.*†J. B. Dickey, B. S., *Specialist in Soil Fert. and Agron.**A. J. Farley, B. S., (*Asst.*) *Hort.**O. A. Gage, Ph. D., *Phys.**H. B. Gordon, Ph. D., (*Asst.*) *Chem.*†Mathilde Groth, *Lab. Asst. in Bot.*

- *B. D. Halsted, D. Sc., *Bot., Hort.*;
 ‡W. H. Hamilton, B. S., *Asst. State Leader of County Agts.*
 †J. H. Hankinson, A. B., *State Leader of County Agts.*
 †M. Anna Hauser, B. S., *State Home Dem. Leader.*
 *†T. J. Headlee, Ph. D., *Ent. (State Ent.)*.
 *†Frank Helyar, B. S., *Dir. Short Courses; Assoc. in Administration.*
 *J. P. Helyar, M. S., (*Asst.*) *Bot.*
 *Dorothy Hope, B. S., *Instr. Dom. Art and Sci.*
 †A. M. Hulbert, *State Leader of Boys' and Girls' Clubs.*
 *J. M. Hunter, B. S., *Instr. An. Husb.*
 *R. F. Layton, B. S., *Asst. in Chem.*
 *G. F. Leonard, M. D., *Lect. in Bact.*
 *H. R. Lewis, M. Agr., *Poultry Husb.*
 *J. V. Lewis, S. B., *Geol.*
 *B. I. MacDonald, M. S., *Instr. Chem.*
 †W. H. Martin, B. S., *Research Asst. in Plant Path.*
 †Augusta E. Meske, *Asst. Ent.*

- *A. C. Metcalf, M. S., *Instr. Chem.*
 ‡Helen E. Minch, *Asst. Specialist in Home Econ.*
 *A. R. Moore, Ph. D., *Physiol.*
 †J. R. Neller, M. S., *Research Asst. in Soils.*
 ‡C. H. Nissley, B. S., *Specialist in Fruit and Veg. Growing.*
 *G. A. Osborn, B. S., *Libr.*
 †E. J. Owen, M. S., *Asst. Bot.*
 *†Alvah Peterson, Ph. D., *Instr. Ent.; Asst. Ent.*
 †R. F. Poole, B. S., *Research Asst. in Plant Path.*
 *F. R. Pratt, M. S., (*Asst.*) *Phys.*
 *W. M. Regan, A. M., *Dairy Husb.*
 *J. A. Ridgway, *Instr. Farm Mech.*
 *L. G. Schermerhorn, B. S., *Instr. Veg. Gard.*
 †J. W. Shive, Ph. D., *Plant Physiol.*
 *W. C. Thompson, B. S., *Instr. Poultry Husb.*
 ‡A. G. Waller,¹ M. S., *Asst. Specialist in Agron.*
 ‡C. R. Woodward, B. S., *Editor.*
 *R. G. Wright, Ph. D., *Chem.*

New Jersey State Agricultural Experiment Station, New Brunswick.

†Station staff.

†J. G. Lipman, Ph. D., *Dir. of Sta.*

- †Alva Agee, M. S., *State Supt. of Farm Dem.*
 †Frank App, B. S., *Agron.*
 †C. S. Beckwith, B. S., *Asst. Ent.*
 †H. M. Biekart, *Florist.*
 †M. A. Blake, B. S., *Hort.*
 †C. S. Cathcart, M. S., *Chem.*
 †C. S. Clarkson, B. S., *Asst. Chem.*
 †W. B. Combs, A. M., *Asst. Dairy Husb.*
 †C. H. Connors, B. S., *Asst. Expt. Hort.*
 †W. A. Cray, *Fert. and Feed Sampler.*
 †A. J. Farley, B. S., *Specialist in Fruit Invest.*
 †Jessie G. Fiske, Ph. B., *Asst. Seed Analyst.*
 †R. R. Hannas, B. S., *Research Asst. in Poultry Husb.*
 †T. J. Headlee, Ph. D., *Ent. (State Ent.)*
 †J. P. Helyar, M. S., *Seed Analyst.*

- †J. M. Hunter, B. S., *Asst. An. Husb.*
 †H. R. Lewis, M. Agr., *Poultry Husb.*
 †H. C. McLean, Ph. D., *Soil Research Chem.*
 †W. M. Regan, A. M., *Dairy Husb.*
 †H. P. Rood, *Sampler and Asst.*
 †L. A. Ruzicka, *Greenhouse Asst.*
 †L. G. Schermerhorn, B. S., *Specialist in Veg. Invest.*
 †Morris Siegel, *Poultry Foreman.*
 †W. R. Stone, *Orchard Foreman.*
 †W. C. Thompson, B. S., *Research Asst. in Poultry.*
 †C. S. Van Nuis, *Assoc. in Farm Crops.*
 †A. C. Wark, *Lab. Asst. in Chem.*
 †E. H. Wene, *Poultry Foreman.*
 †R. L. Willis, B. S., *Asst. Chem.*
 †C. R. Woodward, B. S., *Editor.*

NEW MEXICO.

New Mexico College of Agriculture and Mechanic Arts and the Agricultural Experiment Station, State College (freight and express address, Mesilla Park).

*College faculty. †Station staff. ‡Extension staff.

- *A. D. Crile, *President.*
 *††Fabian Garcia, M. S. A., *Dir. of Sta. Hort.* (*†‡)
 †A. C. Cooley, B. S. A., *Dir. of Ext. Service. State Leader of County Agents.*
 †D. W. Bloodgood, B. S. M. E., *Irrig. Engin.*
 †W. T. Conway, B. S., *Boys' and Girls' Club Work.*
 *†D. H. Cook, B. S., *Instr. Chem.; Asst. Chem.*
 †W. L. Elser, B. S., *Farm Mgt. Dcm., Asst. State Leader of County Agts.*

¹ On leave.

- †Gertrude Espinosa, *Asst. in Boys' and Girls' Club Work.*
 *†A. B. Fite, B. S., (*Asst.*) *Hort.*; *Asst. Hort.*
 *†Luther Foster, M. S. A., *An. Husb.*
 *†J. M. Franklin, B. S., *Asst. in Hort.*
 *†Floy E. French, *Libr.*
 *†L. A. Higley, Ph. D., *Chem.*
 *†C. W. Humble, B. S. A., *Asst. Agron.*
 *†J. D. Hungerford, B. S., *Nutr. Chem.*
 †E. P. Johnson, D. V. M., *Ext. Vet.* (*Coop. U. S. D. A.*).
 †Elizabeth Koger, B. S., *Asst. Dcm. in Home Econ.*
 *†J. R. Meeks, B. S. A., *Asst. An. Husb.*

- *†D. E. Merrill, M. S., *Biol.*
 *Pearl C. Miller, B. S., *Household Econ.*
 †José Quintero, B. S. M. E., *Asst. Chem.*
 †Gall Ritchie, B. S., *State Dcm. in Home Econ.*
 *†J. W. Rigney, B. S., (*Asst.*) *Hort.*; *Asst. Hort.*
 *†R. L. Stewart, M. S., *Agron.*
 *Helen I. Thissell, *Instr. Household Econ.*
 *†C. A. Thompson, B. S., *Asst. Agron.*
 *††R. B. Thompson, B. S. A., *Poultry Husb.*
 †J. E. Watt, M. S. A., *State Dairy Agent.*
 *†F. C. Werkenthin, M. A., (*Asst.*) *Biol.*; *Asst. Biol.*
 †C. P. Wilson, M. S., *Editor.*

NEW YORK.

New York State College of Agriculture and the Agricultural Experiment Station at Cornell University, Ithaca.

*College faculty. †Station staff. ‡Extension staff.

- *J. G. Schurman, D. Sc., LL. D., *President of University.*
 *†A. R. Mann, B. S. A., A. M., *Dean Coll. of Agr., Dir. Agr. Expt. Sta., and Dir. of Ext.*
 *††Bristow Adams, B. A., *Editor and Chief of Pubs.*
 *†A. A. Allen, Ph. D., (*Asst.*) *Ornith.*
 *C. L. Allen, A. B., *Asst. in An. Husb.*
 *E. G. Anderson, B. S., *Asst. in Plant Brdg.*
 †W. E. Ayers, *Ext. Instr. Dairy Indus.*
 †H. E. Babcock, Ph. B., *State Leader of County Agts.*
 *E. E. Barker, Ph. D., (*Asst.*) *Plant Brdg.*
 †J. H. Barron, B. S. A., (*Ext. Asst.*) *Farm Crops.*
 ††M. F. Barrus, Ph. D., *Plant Path.*
 *†A. C. Beal, Ph. D., *Flor.*
 *A. R. Bechtel, A. M., *Instr. Bot.*
 *†E. W. Benjamin, Ph. D., (*Asst.*) *Poultry Husb.; Poultry Husb.*
 *J. P. Benson, B. S., *Asst. Bot.*
 *John Bentley, jr., M. F., (*Asst.*) *For. Engin.*
 *A. M. Besemer, B. S., *Instr. Dairy Indus.*
 *Cornelius Betten, Ph. D., *Sec., Registrar.*
 *Robert Bier, B. S., *Ext. Instr. Veg. Gard.*
 *†J. A. Bizzell, Ph. D., *Soil Tech.*
 *Beulah Blackmore, (*Asst.*) *Home Econ.*
 *C. P. Blackwell, M. S., *Asst. in Farm Crops.*
 †F. M. Blodgett, Ph. D., (*Asst.*) *Plant Path.*
 †W. K. Blodgett, jr., A. B., (*Ext. Asst.*) *Rural Engin.*
 †C. A. Boutelle, (*Ext. Asst.*) *An. Husb.*
 *J. E. Boyle, Ph. D., *Agr. Econ.*
 *Mrs. Jessie A. Boys, B. S., *Instr. Home Econ.*
 *Mrs. Edith F. Bradford, B. S., *Instr. Home Econ.*
 *G. H. Bradley, M. S., *Asst. in Biol.*
 *†J. C. Bradley, Ph. D., (*Asst.*) *Systematic Ent.; Ent.*
 *J. M. Brannon, M. A., *Instr. Bot.*
 *Thomas Bregger,¹ B. S., *Asst. in Plant Brdg.*
 *H. E. Bremer, B. S., *Asst. in Dairy Indus.*
 *†Sarah L. Brewer, B. S., *Instr. Home Econ.*
 *L. G. Brown,¹ B. S., *Asst. in Biol.*
 *H. O. Buckman, Ph. D., *Soil Tech.*
 *W. H. Burkholder, Ph. D., *Invest. in Plant Path.*
 †M. C. Burritt, M. S. A., *Vice Dir. of Ext.*
 †F. P. Russell, B. A., *Ext. Instr. Plant Brdg.*
 †Helen Canon, B. S., *Ext. Instr. Home Econ.*
 *†G. W. Cavanaugh, B. S., *Agr. Chem.*
 *B. A. Chandler, M. S., (*Asst.*) *For.*
 *†W. H. Chandler, Ph. D., *Pomol.*
 *W. L. Chandler, M. S., *Instr. Ent. (Parasitol.).*
 †Charles Chupp, Ph. D., *Ext. Instr. Plant Path.*
 *P. W. Claassen, M. A., *Instr. Nat. History.*
 †C. P. Clark, B. S., *Ext. Instr. Farm Mgt.*
 †G. H. Collingwood, A. M., (*Ext. Asst.*) *For.*
 *Mrs. Anna B. Comstock, B. S., (*Asst.*) *Nature Study.*
 *E. E. Conklin, jr., B. S., *Asst. in Veg Gard.*
 †Jay Coryell, B. S., *Asst. State Leader of County Agts.*
 *R. W. E. Cowan, B. S., *Asst. in Dairy Indus.*
 *W. T. Craig, *Instr. Plant Brdg.*

¹ On leave.

- ††C. R. Crosby, A. B., *Ent.*
 †D. J. Crosby, M. S., *Ext. Teaching.*
 *L. J. Cross, Ph. D., *Chem. in Agr.*
 *O. F. Curtis, Ph. D., (*Asst.*) *Bot.*
 *†R. W. Curtis, M. S. A., *Landsc. Art.*
 *E. G. Davis, B. S., *Landsc. Art.*
 *C. C. Demaree, A. B., *Asst. in Bot.*
 *H. V. DeMott, M. S., *Asst. Pomol.*
 *Ernest Dorsey, B. S., *Asst. in Plant Brdg.*
 *E. H. Dusham, M. S., *Instr. Biol.*
 †G. C. Dutton, *Ext. Instr. Dairy Indus.*
 *O. W. Dynes, M. S. A., *Instr. Farm Crops.*
 *A. J. Eames, Ph. D., (*Asst.*) *Bot.*
 †E. R. Eastman, *Asst. State Leader of County Agts.*
 *G. C. Embodry, Ph. D., (*Asst.*) *Aquiculture.*
 *†R. A. Emerson, D. Sc., *Plant Brdg.*
 *Lawrance Erickson, B. A., *Asst. Bot.*
 *G. A. Everett, A. B., LL. B., *Ext. Teaching.*
 *M. E. Farnham, B. S., *Instr. Flor.*
 †E. O. Fippin, B. S. A., *Soil Tech.*
 *W. I. Fisher, *Instr. Plant Brdg.*
 *H. M. Fitzpatrick, Ph. D., (*Asst.*) *Plant Path.*
 *Laura Florence, M. A., *Asst. in Ent.*
 *A. C. Fraser, B. S., *Instr. Plant Brdg.*
 *W. S. Frost, B. S., *Asst. in Agr. Chem.*
 *G. R. Gage, M. S., *Asst. Bot.*
 *Ada E. Georgia, *Asst. in Nat. History.*
 *A. W. Gibson, B. S., *Asst. Farm Supt.*
 †Royal Gilkey, B. S. A., (*Asst.*) *Ext. Service and Supervisor of Reading Courses.*
 *R. L. Gillett, B. S., *Instr. Farm Mgt.*
 *Julia Gleason,¹ *Instr. Home Econ.*
 †R. W. Green, B. S., *Asst. Chief of Pubs.*
 *†C. T. Gregory, Ph. D., (*Asst.*) *Plant Path.; Plant Path.*
 †F. L. Griffin, M. S., *Rural Ed.*
 †Lela G. Gross, *Asst. Editor.*
 †C. H. Guise, M. F., *Ext. Instr. For.*
 *†E. S. Guthrie, Ph. D., *Dairy Indus.*
 *V. R. Haber,¹ M. A., *Asst. Biol.*
 *E. S. Ham,¹ B. S., *Instr. An. Husb.*
 *C. C. Hamilton,¹ M. S., *Asst. in Ent.*
 *Anna J. Hancy, A. M., *Instr. Bot.*
 *E. V. Hardenburg, M. S., *Instr. Farm Crops.*
 *†M. H. Harper, M. S., *An. Husb.*
 *J. R. Hartzog, B. S., *Asst. in Landsc. Art.*
 †L. E. Harvey, B. S., *Ext. Instr. Farm Mgt.*
 *L. A. Hausman, B. A., *Instr. Met.*
 *L. S. Hawkins, B. A., *Specialist in Agr.*
 *I. M. Hawley, Ph. D., *Ent. Invest.*
 *Blanche E. Hazard, M. A., (*Asst.*) *Home Econ.*
 *L. E. Hazen, M. E., (*Asst.*) *Farm Mech.*
 *†A. J. Heinicke, Ph. D., (*Asst.*) *Pomol.; Asst. Pomol.*
 *Mary F. Henry, A. B., *Instr. Home Econ.*
 *†G. W. Herrick, B. S. A., *Econ. Ent.; Ent.*
 *L. R. Hessler, Ph. D., (*Asst.*) *Plant Path.*
 *G. F. Heuser, B. S., *Instr. Poultry Husb.*
 *Mary E. Hill, B. S., *Asst. in Biol.*
 *Eleanor Hillhouse, B. S., *Asst. in Home Econ.*
 *E. F. Hopkins,¹ B. S., *Instr. Plant Path.*
 *†H. A. Hopper, M. S. A., *An. Husb.*
 *†R. S. Hosmer, B. A. S., M. F., *For.*
 †Sara B. Huff, *Ext. Instr. Home Econ.*
 *Anna E. Hunn, B. S., *Instr. Home Econ., Mgr. Home Econ. Cafeteria.*
 *C. E. Hunn, *Asst. Plant Propagation.*
 †L. M. Hurd, *Ext. Instr. Poultry Husb.*
 *C. B. Hutchison, M. S. A., *Plant Brdg.*
 *H. C. Jackson, B. S., *Instr. Dairy Indus.*
 *†I. C. Jagger, M. S., (*Asst.*) *Plant Path.; Plant Path. (Rochester).*
 *O. A. Johannsen, Ph. D., *Gen. Biol.*
 *A. S. Kenerson, M. S., *Instr. Veg. Gard.*
 *C. H. Kennedy, M. A., *Instr. Limnology*
 *A. C. King, B. S. A., *Farm Practice.*
 *E. R. King,¹ B. S., (*Asst.*) *Apiculture.*
 *E. L. Kirkpatrick, B. S., (*Asst.*) *Veg Gard.*
 *H. H. Knight,¹ B. S., *Instr. Ent.*
 *H. E. Knowlton,¹ B. S., *Instr. Bot.*
 *†Lewis Knudson,¹ Ph. D., *Bot.; Plant Physiol.*
 †W. G. Krum, *Ext. Instr. Poultry Husb.*
 *P. J. Kruse, Ph. D., (*Asst.*) *Rural Ed.*
 *G. N. Lauman, B. S. A., *Rural Econ.*
 *C. W. Leister, B. S., *Asst. in Ornith.*
 †E. W. Leland, B. S. A., *Supt. Field Expts. in Soil Tech.*
 *†K. C. Ilvermore, M. S. A., *Farm Mgt.*
 †E. H. Lott, B. S., *Instr. Ext. Service.*
 †C. B. Loudenslager, B. S., *Asst. in Ext. Service.*
 *†H. H. Love, Ph. D., *Plant Brdg. Invest.*
 *David Lumsden, (*Asst.*) *Flor.*
 *W. F. Lusk, M. S., *Rural Ed.*
 *†T. L. Lyon, Ph. D., *Soil Tech.*
 *J. C. McCurdy, B. S. C. E., (*Asst.*) *Rural Engin.*
 *T. J. McInerney, M. S., (*Asst.*) *Dairy Indus.*
 †A. E. McKinney, A. M., *Asst. in Agr. Chem.*
 *L. H. MacDaniels, Ph. D., *Instr. Bot.*
 *L. M. Massey, Ph. D., (*Asst.*) *Plant Path.*
 *†Robert Matheson, Ph. D., (*Asst.*) *Econ. Ent.; Asst. Ent.*

¹ On leave.

- *†L. A. Maynard,¹ Ph. D., (*Asst.*) *An. Husb.*; *An. Husb.*
 *DeVoe Meade, B. S., *Instr. An. Husb.*
 *Lua A. Minns, B. S., *Instr. Flor.*
 *E. G. Misner, B. S., *Instr. Farm Mgt.*
 *†E. G. Montgomery, M. A., *Farm Crops.*
 *E. D. Montillon, B. Arch., (*Asst.*) *Landsc. Art.*
 *R. A. Mordoff, B. S., *Instr. Mct.*
 *R. J. Morgan, B. S., *Asst. in Soil Tech.*
 †R. S. Moseley, *Ext. Instr. Poultry Husb.*
 *Winifred Moses, B. S., *Instr. Home Econ.*
 *W. L. C. Muenscher, M. A., *Asst. Bot.*
 *†C. H. Myers, Ph. D., *Plant Brdg.*
 *W. I. Myers, B. S., *Instr. Farm Mgt.*
 *R. S. Nanz, B. S., *Asst. in Bot.*
 *†J. G. Needham, Ph. D., *Limnology, Ent., Nature Study.*
 *C. V. Noble, B. S., *Instr. Farm Mgt.*
 *L. J. Norton, B. S., *Instr. Farm Mgt.*
 †Claribel Nye, B. S., *Ext. Instr. Home Econ.*
 *E. L. Overholser, M. A., (*Asst.*) *Pomol.*
 *H. D. Phillips,¹ B. S., *Instr. Rural Econ.*
 †G. R. Phipps, B. S., *Instr. Ext. Service.*
 *W. H. Rankin, Ph. D., (*Asst.*) *Plant Path.*
 *A. B. Recknagel,¹ M. F., *For. Mgt. and Utilization.*
 *†Donald Reddick, Ph. D., *Plant Path.*
 *†R. W. Rees, B. S., *Pcmol.*
 *†F. E. Rice, Ph. D., (*Asst.*) *Agr. Chem.*; *Agr. Chem.*
 *†J. E. Rice, B. S. A., *Poultry Husb.*
 *†H. W. Riley, M. E., *Rural Engin.*
 *†B. B. Robb, M. S. A., (*Asst.*) *Rural Engin.*
 *I. P. Roberts, M. Agr., *Agr. Emeritus.*
 †Montgomery Robinson, Litt. B., B. S., (*Asst.*) *Ext. Service.*
 *Flora Rose, M. A., *Home Econ.*
 *†H. E. Ross, M. S. A., *Dairy Indus.*
 †C. H. Royce, M. S. A., (*Ext. Asst.*) *An. Husb.*
 *†E. S. Savage, Ph. D., *An. Husb.*
 *H. W. Schneek, M. S. A., (*Asst.*) *Veg. Gard.*
 *J. R. Schramm, Ph. D., *Bot.*
 †G. P. Scoville, B. S., (*Ext. Asst.*) *Farm Mgt.*
 *K. J. Seulke, Ph. D., (*Asst.*) *An. Husb.*
 *L. W. Sharp, Ph. D., (*Asst.*) *Bot.*
 *F. B. Sherwood, M. S., *Analyst in Soil Tech.*
 *Edwina M. Smiley, B. A., *Instr. in Plant Path.*
 *B. H. Smith, A. B., *Asst. in Plant Path.*
 *Gladys Smith, B. S., *Asst. in Home Econ.*
 †M. J. Smith, B. S., *Sheep Specialist.*
 *S. N. Spring,¹ M. F., *Silviculture.*
 *†V. B. Stewart, Ph. D., (*Asst.*) *Plant Path.*; *Plant Path.*
 *†W. A. Stocking, jr., M. S. A., *Dairy Indus.*
 *†J. L. Stone, B. Agr., *Farm Practice.*
 *J. L. Strahan, M. S., *Instr. Farm Structures.*
 *G. C. Supplee, M. S. A., *Instr. Dairy Indus.*
 *†G. W. Tailby, jr., B. S. A., *Instr. An. Husb.*; *Stockman.*
 *V. F. Tapke, B. S., *Instr. in Plant Path.*
 *C. L. Thayer, B. S., *Instr. Flor.*
 *†A. L. Thompson, Ph. D., (*Asst.*) *Farm Mgt.*; *Farm Mgt.*
 *H. C. Troy, B. S. A., *Dairy Indus.*
 *†E. M. Tuttle, B. S. A., (*Asst.*) *Rural Ed.*
 †Ruth Van Deman, A. B., *Asst. Editor.*
 *Martha Van Rensselaer, A. B., *Home Econ.*
 *†Alice Van Scoy, B. S., *Asst. in Home Econ.*
 *F. B. Wann, A. B., *Instr. Bot.*
 *Annette J. Warner, (*Asst.*) *Home Econ.*
 *†G. F. Warren, Ph. D., *Farm Mgt.*
 †W. W. Warsaw, B. S. A. E., (*Ext. Asst.*) *Soil Tech.*
 *†R. H. Wheeler, B. S., *Ext. Teaching.*
 *†H. H. Whetzel, M. A., *Plant Path.*
 *†E. A. White, B. S., *Flor.*
 †C. W. Whitney, B. S., *Instr. Ext. Service.*
 *†K. M. Wiegand, Ph. D., *Bot.*
 *R. G. Wiggans, M. A., *Instr. Farm Crops.*
 *J. K. Wilson, Ph. D., (*Asst.*) *Soil Tech.*
 *†W. M. Wilson, M. D., *Mct.*
 *†H. H. Wing, M. S., *An. Husb.*
 *W. C. Woods, A. B., *Asst. in Ent.*
 *†Paul Work,¹ M. S., (*Asst.*) *Veg. Gard.*; *Veg. Gard.*
 *G. A. Works, M. S., *Head Dept. of Rural Ed.*
 *B. P. Young, B. S., *Instr. Ent.*
 *Mrs. Helen B. Young, B. Arch., (*Asst.*) *Home Econ.*
 *L. A. Zimm, B. S., *Instr. Plant Path.*

¹ On leave.

New York State Agricultural Experiment Station, Geneva.

†Station staff.

†W. H. Jordan, D. Sc., LL. D., *Director*.

†R. J. Anderson,¹ B. S., *Assoc. Chem.*
 †R. D. Anthony, M. S., *Assoc. Hort.*
 †W. W. Baer,¹ B. S., *Asst. Chem. (Soils)*.
 †J. C. Baker, Ph. D., *Assoc. Chem.*
 †R. S. Breed, Ph. D., *Bact.*
 †J. D. Brew,¹ B. S., *Asst. Bact.*
 †John Bright, M. S., *Asst. Bact.*
 †G. W. Churchill, Agr., *Supt. Labor.*
 †A. W. Clark, B. S., *Assoc. Chem.*
 †R. C. Collison,¹ M. S., *Agron.*
 †H. J. Conn, Ph. D., *Assoc. Bact.*
 †B. B. Fulton, B. A., *Asst. Ent.*
 †F. E. Gladwin, B. S., *Special Agt. (Chautauqua Grape Work, Fredonia)*.
 †Hugh Glasgow, Ph. D., *Assoc. Ent.*
 †W. O. Gloyer, M. A., *Assoc. Bot.*
 †F. H. Hall, B. S., *Editor, Libr., Vice Dir.*
 †F. Z. Hartzell, M. S., *Assoc. Ent. (Chautauqua Grape Work, Fredonia)*.
 †U. P. Hedrick, D. Sc., *Hort.*

†H. E. Hodgkiss, B. S., *Asst. Ent.*
 †G. H. Howe,¹ B. S., *Asst. Hort.*
 †R. F. Keeler, B. A., *Asst. Chem.*
 †W. L. Kulp, M. S., *Asst. Chem.*
 †Otto McCreary, B. S., *Asst. Chem.*
 †J. E. Mensching, B. S., *Assoc. Chem. (Soils)*.
 †M. T. Munn, M. S., *Asst. Bot.*
 †P. J. Parrott, A. M., *Ent.*
 †G. L. A. Ruehle, M. S., *Asst. Bact.*
 †F. A. Sirrine, M. S., *Special Agt. (River-head)*.
 †G. A. Smith, *Dairy Expert.*
 †F. C. Stewart, M. S., *Bot.*
 †W. C. Stone, M. S., *Asst. Hort.*
 †M. P. Sweeney, M. A., *Asst. Chem.*
 †O. M. Taylor, *Hort. Foreman.*
 †L. Van Slyke, Ph. D., *Chem.*
 †W. F. Walsh, B. S., *Asst. Chem.*
 †J. W. Wellington, B. S., *Asst. Hort.*
 †W. P. Wheeler, *An. Indus.*

NORTH CAROLINA.

North Carolina State College of Agriculture and Engineering, West Raleigh,
 and the Agricultural Experiment Station, Raleigh and West Raleigh.

*College faculty. †Station staff. ‡Extension staff.

*W. C. Riddick, C. E., LL. D., *President*.††B. W. Kilgore, M. S., *Dir. of Sta. Dir. of Ext. Service*.

†J. A. Arey, B. S., *Asst. in Dairy Ext. (Coop. U. S. D. A.)*
 ††F. R. Baker, B. S., C. E., *Asst. Drainage Engin.*
 †E. C. Blair, B. S., *Asst. Agron. (Soil Fert.)*.
 †H. Bocker, *in charge Black Land Branch Sta., Wenona*.
 †L. L. Brinkley, *Soil Survey*.
 *†T. E. Browne, B. A., *Voc. Ed. State Agt. Boys' Clubs*.
 *††W. R. Camp, A. B., *Agr. Econ., Marketing*.
 †J. I. Case, B. S., *Field Asst. in Beef Cattle Work (Coop. U. S. D. A.)*.
 †S. C. Clapp, *Asst. Dir. in charge Mountain Branch Sta., Swannanoa*.
 †C. E. Clark, B. S., *Asst. Dir. Coastal Plain Branch Sta., Rocky Mount*.
 †R. W. Collett, *Asst. Dir. Branch Stas.*
 ††Stanley Combs, B. S., *Asst. in Dairy Farming (Coop. U. S. D. A., Greensboro)*.
 *L. E. Cook, M. S., (*Assoc.*) *Voc. Ed.*
 †R. O. Cromwell,¹ M. S., *Asst. in Plant Diseases*.
 *††R. S. Curtis, B. S. A. (*Assoc.*) *An. Indus.; Beef Cattle and Sheep Invest.*

†S. F. Davidson, B. S., *Asst. Agron.*
 *J. B. Derieux, M. A., *Instr. Phys.*
 †L. R. Detjen, M. S., *Asst. Hort.*
 †E. S. Dewar, B. S., *Asst. Chem.*
 *A. M. Dixon, *Instr. Phys.*
 *J. T. Dobbins, Ph. D., *Instr. Org. Chem.*
 †W. H. Eaton, B. S., *Dairy Expt.*
 ††J. E. Eckert, M. S., *Asst. Field Ent.*
 †George Evans, *Sheep Husb.*
 ††F. R. Farnham, *Asst. in Dairy Farming (Coop. U. S. D. A.)*.
 *R. A. Fetzer, M. A., E. E., *Instr. Chem.*
 *Donald Folsom, Ph. D., *Instr. Plant Physiol.*
 *E. L. Frederick, Ph. D., *Instr. Chem.*
 †G. M. Garren, Ph. B., *Asst. Agron. in Plant Brdg.*
 ††D. T. Gray, M. S., *Chief An. Indus.*
 †J. P. Griffith, B. S., *Asst. Hort.*
 ††J. H. Hall, jr., B. S., *Asst. Agron. (Coop. U. S. D. A.)*.
 †W. G. Haywood, B. Litt., *Fert. Chem.*
 *C. M. Heck, M. A., *Phys.*
 ††V. R. Herman, B. S., *Asst. Agron. in Plant Brdg. (Coop. U. S. D. A.)*.

¹ On leave.

- †R. G. Hill, B. S., *Asst. Dir. in charge Trucking Branch Sta., Willard.*
 †B. T. Horsfield, *Asst. Chem.*
 †Earl Hostetler, B. S., *Asst. in Beef Cattle, Sheep, and Swine Invest.*
 †C. R. Hudson, M. S., *State Agt. Farm Dem.*
 ††W. N. Hutt, B. S. A., *Hort. (State Hort.)*
 *†J. E. Ivey, B. S., *Instr. Poultry Husb.; Asst. in Poultry Invest.*
 †J. Q. Jackson, A. B., *Asst. Chem.*
 †Minnie L. Jamison, *Asst. in Home Dem. Work.*
 †A. L. Jerdan, M. S., *Beef Cattle Field Work (Coop. U. S. D. A.).*
 ††F. H. Jeter, B. S., *Agr. Editor.*
 †J. M. Johnson, M. S., *Farm Mgt. (Coop. U. S. D. A.).*
 *†B. F. Kaupp, M. S., D. V. S., *Poultry Sci.; Poultry Invest. and Path.*
 †P. H. Kime, B. S., *Asst. Agron.*
 *†L. F. Koonce, B. Agr., D. V. M., *Instr. Vet. Sci.*
 *S. G. Lehman, M. S., *Instr. Bot.*
 †R. W. Leiby, M. S., *Asst. Ent.*
 †J. A. Livingston, *Asst. in Credit Unions.*
 †H. M. Lynde, C. E., *Drainage Engin. (Coop. U. S. D. A.).*
 †D. M. McCarty, B. S., *Asst. Chem. (An. Nutr.).*
 *Donald McCluer, B. S., *Instr. An. Husb., Dairying.*
 †O. J. McConnell, *Asst. in Cotton Grading (Coop. U. S. D. A.).*
 †Mrs. Jane S. McKimmon, *State Home Dem. Agt.*
 †R. H. Mason, *Asst. in Dairy Farming (Coop. U. S. D. A.).*
 †E. H. Mathewson, *Tobacco Expert (Coop. U. S. D. A.).*
 †C. D. Matthews, B. S., *Expt. Hort.*
 †F. T. Meacham, M. S., *Asst. Dir. Piedmont Branch Sta., Statesville.*
 *†Z. P. Metcalf, B. A., *Zool., Ent.; Ent.*
 *C. F. Miller, Ph. D., *Instr. Chem.*
 †J. E. Moses, B. S., *Pig Club Agt.*
 †E. G. Moss, *Asst. Dir. Tobacco Branch Sta., Oxford (Coop. U. S. D. A.).*
 *C. L. Newman, M. S., *Agron.*
 †D. R. Noland, jr., *Asst. in Dairy Farming (Coop. U. S. D. A.).*
 †A. G. Oliver, *Poultry Clubs (Coop. U. S. D. A.).*
 †F. D. Owen, D. V. M., *Hog Cholera Work (Coop. U. S. D. A.).*
 †W. F. Pate, M. S., *Agron. (Soils).*
 †F. T. Peden, B. S., *Asst. in Beef Cattle and Sheep Invest. (Coop. U. S. D. A.).*
 †S. O. Perkins, B. S., *Soil Survey.*
 †J. M. Pickel, Ph. D., *Feed Chem.*
 *†J. P. Pillsbury, B. S., *Hort.*
 †J. K. Plummer, Ph. D., *Soil Chem.*
 †A. J. Reed, B. S., *Dairy Farming (Coop. U. S. D. A.).*
 *T. C. Reed, A. M., *An. Indus.*
 *†G. A. Roberts, B. S., D. V. S., *Vet. Sci., Physiol.*
 †A. K. Robertson, B. S., *Agt. in Corn Club Work.*
 †S. G. Rubinow, M. S., *Asst. to Dir. of Ext. Service.*
 †A. R. Russell, *Asst. in Field Expts.*
 †C. L. Sams, *Specialist in Bee Keeping (Coop. U. S. D. A.).*
 †W. K. Scott, B. S., *Asst. in Club Work.*
 ††Franklin Sherman, M. S., *Ent.*
 *M. E. Sherwin, M. S., *Soils.*
 *Herbert Spencer, M. S., *Instr. Zool., Ent.*
 *T. H. Stafford, B. S., *Instr. Soils.*
 *F. J. Sutton, M. S., *Instr. Hort.*
 *G. W. Underhill, B. S., *Instr. Zool., Ent.*
 *J. O. Ware, B. S., *Instr. Agron.*
 *††C. B. Williams, M. S., *Agron., Dean of Agr., Vice Dir. of Sta.*
 *L. F. Williams, Ph. D., *(Assoc.) Chem.*
 *Mrs. Charlotte M. Williamson, *Libr.*
 †R. Y. Winters, Ph. D., *Agron. in Plant Brdg.*
 *†W. A. Withers, A. M., *Chem. Vice Pres.*
 *†F. A. Wolf, Ph. D., *Bot., Plant Path.; Plant Path.*

The Negro Agricultural and Technical College, Greensboro.

*College faculty. †Extension staff.

*J. B. Dudley, A. M., LL. D., *President.*

- *B. W. Barnes, B. Agr., *Instr. Dairying.*
 *J. H. Bluford, A. M., *Dir. Dept. of Agr. and Chem., Instr. Agr. and Chem.*
 *R. C. Chatham, B. S., D. V. M., *Instr. Vet. Med.*
 *O. G. Donnell, *Florist.*
 *A. L. Mebane, M. S., *Instr. Agron., Farm Supt.*
 *C. B. Reld, B. Agr., *Instr. Agr.*
 †J. D. Wray, B. Agr., *State Organizer of Boys' Corn Clubs.*

NORTH DAKOTA.

North Dakota Agricultural College and the Agricultural Experiment Station, Agricultural College (freight and express address, Fargo).

*College faculty. †Station staff. ‡Extension staff.

- *†E. F. Ladd, B. S., LL. D., *President. Dean Chem. and Pharm. (*) Chem. (†) State Chem. and Food Commissioner.*
- *†Leunis Van Es, M. D., V. S., *Acting Dir. of Sta. Vet. Sci. (*†)*
- †G. W. Randlett, B. S., *Dir. of Ext. Work. State Leader of County Agts.*
- †R. F. Beard,¹ B. S., *Asst. in Agr. Chem.*
- *†H. L. Bolley, M. S., *Bot., Dean of Biol.; Bot., Plant Path.*
- *F. W. Christensen, M. S., *An. Nutr.*
- *O. O. Churchill, B. S., *Agron.*
- †P. E. Clement, M. A., *Asst. State Leader of County Agts.*
- *M. L. Dolt, Ph. D., *Org. and Anal. Chem.*
- †R. C. Doneghue, M. S., *Agron.*
- †C. J. T. Doryland, M. S., *Soil Bact.*
- †U. S. Ebner, B. S., *Biol. Asst. (Coop. U. S. D. A.).*
- †Mary L. Fitzgerald, B. S., *Asst. Club Leader.*
- *H. L. Foust, D. V. M., *(Asst.) Vet. Sci.*
- †D. W. Frear, M. S., *Asst. State Leader of County Agts.*
- *Nola K. Fromme, B. S., *(Asst.) Dom. Sci.*
- †D. W. Galehouse, *State Club Leader.*
- †W. L. Guy, B. S., *Farm Supt.*
- *M. T. Hanke, Ph. D., *(Asst.) Physiol. Chem.*
- †J. W. Ince, M. A., *Asst. in Agr. Chem.*
- *Katherine Jensen, M. S., *Home Econ.*
- *E. S. Keene, M. E., *Phys.*
- *J. R. Keithley, M. S., *Dairying.*
- †C. J. Krakover, M. S., *Asst. Bot.*
- †May C. McDonald, M. A., *Home Econ.*
- *Mrs. Ethel McVeety, *Libr.*
- †Edwin Mayland, B. S., *Farm Mgt.*
- *H. E. Metcalf, B. S., *Instr. Zool., Physiol.*
- *G. E. Miller, M. A., *(Asst.) Biol.*
- *C. I. Nelson, B. A., *(Asst.) Bact.*
- †Julia O. Newton, B. S., *Asst. in Home Econ.*
- *Kate S. North, B. S., *Instr. Home Econ.*
- †A. J. Ogaard, B. S., *Supt. Substa., Hettinger (Coop. U. S. D. A.).*
- †‡W. C. Palmer, M. S., *Agr. Editor.*
- *W. T. Pearce, Ph. D., *(Asst.) Gen. Chem.*
- †W. H. Peters, B. S., *An. Husb.*
- †E. J. Peterson, *Poultry.*
- †W. R. Porter, M. S., *Supt. Dem. Farms.*
- †C. S. Reddy, M. S., *Asst. Plant Path. (Coop. U. S. D. A.).*
- *E. S. Reynolds, Ph. D., *(Assoc.) Bot.*
- †L. M. Roderick, D. V. M., *Asst. Vct.*
- †C. H. Ruzicka, B. S., *Supt. Substa., Williston (Coop. U. S. D. A.).*
- †Thomas Sanderson, *Miller.*
- *A. F. Schalk, D. V. M., *Vct. Physiol.*
- †Mrs. Adele Shepperd, *Asst. Chem. (Water).*
- †J. H. Shepperd, M. S. A., *Agr., Vice Dir. of Sta., and in charge of Substas.*
- †E. D. Stewart, B. S., *Supt. Substa., Langdon.*
- †T. E. Stoa, B. S., *Asst. Agron. (Flax. Coop. U. S. D. A.).*
- *Bessie E. Taylor, B. S., *(Asst.) Dom. Art.*
- †Levi Thomas, M. S., *Asst. Chem. (Milling and Baking. Coop. U. S. D. A.).*
- *E. J. Thompson, B. S., *An. Husb.*
- †O. A. Thompson, B. S., *Supt. Substa., Edgely.*
- †John Thysell, B. S., *Supt. Substa., Dickinson (Coop. U. S. D. A.).*
- *C. B. Waldron, B. S., *Hort., For., Dean of Agr.*
- †L. R. Waldron, M. A., *in charge Plant Brdg. Invest.*
- †‡H. O. Werner, B. S., *Asst. Hort. in charge.*

¹ On leave.

OHIO.

The Colleges of Agriculture and of Veterinary Medicine, Ohio State University, Columbus.

*College faculty. ‡Extension staff.

*W. O. Thompson, A. M., D. D., LL. D., *President of University.**Alfred Vivian, Ph. G., *Dean Coll. of Agr. Agr. Chem.*‡C. S. Wheeler, B. S., *Dir. of Agr. Ext. Work.**D. S. White,¹ D. V. S., *Dean Coll. Vet. Med. Vet. Med.**Maud G. Adams, B. S., *Instr. Home Econ.*‡F. L. Allen, *Supervisor of Insts. and Ext. Schools.*‡A. E. Anderson, A. B., *Asst. State Leader of County Agts.*‡M. A. Bachtell, B. S., *Specialist in Soils.*‡L. P. Bailey, *Instr. Dairying (Tacoma).**C. M. Baker, B. S., *Instr. Agr. Journalism.*‡J. T. Barker, M. S., *Specialist in Soils.**E. E. Barnes, B. S., *Asst. in Soils.**W. M. Barrows, M. S., (Asst.) *Zool., Ent.*‡F. H. Beach, B. S., *Specialist in Hort.**F. E. Bear, Ph. D., *Agr. Chem. and Soils.*‡L. P. Beechey, D. V. S., *Specialist in Vet. Med.*‡Mary Betz, B. S., *Instr. Home Econ.**A. M. Bleile, M. D., *Anat., Physiol.**C. E. Boord, Ph. D., (Asst.) *Chem.**J. A. Bownocker, D. Sc., *Geol.**O. V. Brumley, V. S., *Vet. Surg., Dir. Clinics, Actg. Dean Coll. Vet. Med.*‡Lena Bumpas, B. S., *Instr. Home Econ.*‡Howard Call, B. S., *Instr. Ext. Schools.**J. E. Carman, Ph. D., *Geol.**J. S. Coffey, B. S., (Asst.) *An. Husb.**A. D. Cole, M. A., *Phys.**C. T. Conklin, B. S., *Instr. An. Husb.**G. W. Conrey, M. A., *Instr. Soils.**J. S. Crabb, *Asst. in Bot.*‡G. B. Crane, B. S., *Sec. Agr. Ext. Work.*‡R. B. Cruickshank, B. S., (Asst.) *Hort.*‡G. N. Dagger, B. S., *Farm Mgt. Dem.*‡A. B. Dann, M. S., (Ext. Asst.) *Poultry Husb.*‡F. C. Dean, A. B., *Agr. Editor.**D. M. DeLong, M. S., *Instr. Zool., Ent.**Freda Detmers, Ph. D., (Asst.) *Bot.*‡Rhoda E. Dick, B. S., *Instr. Home Econ.**E. P. Durrant, M. A., (Asst.) *Anat., Physiol.**R. F. Earhart, Ph. D., *Phys.*‡Porter Elliott, B. S., *Asst. Agron. (West Mansfield).**P. H. Elwood,¹ B. S., (Asst.) *Landsc. Arch.**H. E. Erdman, B. S., (Asst.) *Rural Econ.**Oscar Erf, B. S., *Dairying.*‡H. E. Eswine, *Instr. Public School Agr.**W. L. Evans, Ph. D., *Chem.**J. I. Falconer, Ph. D., (Asst.) *Rural Econ. Actg. Head of Dept.*‡Ray Fife, B. A., *Asst. State Club Leader.**C. W. Foulk, B. A., *Chem.**H. B. Froning, M. A., *Instr. Bact.*‡Mary A. Graber, B. S., *Instr. Home Econ.**R. F. Griggs, Ph. D., (Asst.) *Bot.*‡W. E. Hanger, B. S., *Specialist in Agr. Ext.**Maude C. Hathaway, B. S., (Asst.) *Econ.**H. G. Heil, Ph. B., *Instr. Phys.**T. M. Hills, B. Ph., (Asst.) *Geol.**J. S. Hine, B. S., (Assoc.) *Zool., Ent.**W. R. Hobbs, D. V. M., *Instr. Vet. Med.*‡Hulda E. Horst, B. S., *Instr. Home Econ.**A. C. Hottes, M. S., (Asst.) *Hort.*‡D. D. Hughes, B. S., *Farm Mgt. Dem.**J. L. Hutchison, M. S., *Instr. Agr. Chem. and Soils.**F. W. Ives, B. S. M. E., (Asst.) *Agr. Engin.**F. S. Jacoby, B. S., (Asst.) *Poultry Husb.*‡Charlotte H. Johnson, B. S., *Instr. Home Econ.*‡O. M. Johnson, M. S., *State Leader of County Agts.**Olive B. Jones, B. A., *Libr.*‡Treva Kauffman, B. S., *Instr. Home Econ.**D. J. Kays, B. S., *An. Husb.*‡M. C. Kilpatrick, *Specialist in Poultry Husb.**W. J. Kostir, M. A., *Instr. Zool., Ent.**F. H. Kreckler, Ph. D., (Asst.) *Zool., Ent.**F. A. Lambert,¹ D. V. M., (Asst.) *Comp. Anat.**F. L. Landacre, Ph. D., *Anat.**L. O. Lantis, M. A., *Instr. Rural Econ.**Grace Linder, B. A., *Instr. Home Econ.**J. F. Lyman, Ph. D., *Agr. Chem.*‡J. E. McClintock, B. S., *Supervisor Ext. Pubs. and Corresp. Courses.**G. M. McClure, M. S., *Instr. Soils and Soil Chem.**G. W. McCuen, B. S., *Instr. Agr. Engin.**Leila M. McGuire, B. S., *Asst. in Home Econ.*¹ On leave.

†Ivan McKellip, M. S., *Cow Testing Work* (Coop. U. S. D. A.).

*William McPherson,¹ Ph. D., *Chem.*

*Clara G. Mark, A. M., *Instr. Geol.*

*C. L. Metcalf, M. A., (Asst.) *Zool., Ent.*

*L. M. Montgomery, M. S., *Hort.*

*C. B. Morrey, M. D., *Bact.*

*W. H. Mosier, B. S., *Instr. Hort.*

†Maud Okey, B. S., *Instr. Home Econ.*

*Herbert Osborn, D. Sc., (Research) *Zool., Ent.*

*R. C. Osburn, Ph. D., *Head Dept. Zool., Ent.*

†Virgil Overholt,¹ B. S., *Instr. Agr. Engin.*

*Wendell Paddock, M. S., *Hort.*

†W. H. Palmer, M. S., *State Club Leader.*

*J. B. Park, D. Sc., *Farm Crops.*

*T. D. Phillips, B. S., (Asst.) *Rural Econ.*

*T. G. Phillips,¹ M. S., (Asst.) *Agr. Chem.*

*C. S. Plumb, B. S., *An. Husb.*

*P. B. Potter, B. S., *Instr. Agr. Engin.*

*H. C. Ramsower, B. S., *Agr. Engin.*

*A. G. G. Richardson, V. M. D., *Vet. Path.*

*H. C. Sampson, Ph. D., *Instr. Bot.*

*J. H. Schaffner,¹ M. S., *Bot.*

*N. W. Scherer, M. S., (Asst.) *For.*

*H. W. Schuer, M. S., *Instr. Farm Crops.*

*G. L. Schuster, B. S., *Asst. in Farm Crops.*

*P. B. Sears,¹ M. A., *Instr. Bot.*

*R. J. Seymour, M. S., M. D., (Assoc.) *Anat., Physiol.*

*J. N. Shoemaker, D. V. M., (Asst.) *Vet. Med.*

*Septimus Sisson, S. B., *Vet. Med.*

*Lila M. Skinner, M. A., *Instr. Home Econ.*

*V. C. Smith, B. S., *Asst. to Dean, Sec. Coll. of Agr.*

*J. H. Snook, D. V. M., (Asst.) *Vet. Surg.*

*W. A. Starin, M. A., (Asst.) *Bact.*

*W. F. Stewart, M. S., (Asst.) *Agr. Ed.*

*R. B. Stoltz, B. S., (Asst.) *Dairying.*

*T. C. Stone, B. S., *Instr. An. Husb.*

*W. G. Stover, A. M., (Asst.) *Bot.*

*A. D. Taylor, M. S., *Landsc. Arch. (Cleveland).*

*L. E. Thatcher, Ph. G., *Instr. Field Crops.*

*C. L. Thrash, B. S., *Asst. in Soils.*

*E. N. Transeau, Ph. D., *Plant Physiol., Actg. Head Dept. of Bot.*

*Marian L. Tucker, B. S., *Instr. Home Econ.*

*Anna R. Van Meter, M. S., *Home Econ.*

*W. A. Verwiebe, B. A., *Instr. Geol.*

*Grace G. Walker, B. S., *Instr. Home Econ.*

‡Jessie Whitacre, B. S., *Instr. Home Econ.*

*Edna N. White, B. A., *Home Econ.*

*C. J. Willard, M. S., (Asst.) *Farm Crops.*

‡Florence H. Willison, B. S., *Instr. Home Econ.*

*J. R. Withrow, Ph. D., *Chem.*

‡J. W. Wuichet, B. S., *Specialist in An. Husb.*

Ohio Agricultural Experiment Station. Wooster.

†Station staff.

†C. E. Thorne, M. S. A., *Director. Soil Fertility.*

†W. H. Alexander, *Climat. (Columbus: Detailed by U. S. D. A.).*

†E. R. Allen, Ph. D., *Assoc. in Soil Biol.*

†J. W. Ames, M. S., *Chief Chem., Assoc. in Soil Chem.*

†D. C. Babcock, A. B., *Asst. Bot.*

†F. H. Ballou, *Field Asst. Hort. (Newark).*

†R. B. Barker, B. S., *Asst. in Farm Mgt.*

†F. E. Bear, M. S., *Assoc. in Soil Invest (Columbus).*

†G. E. Boltz, B. S., *Asst. Chem.*

†A. Bonazzi, B. Agr., *Asst. Soil Tech.*

†M. O. Bugby, B. S., *Supt. Expt. Farms (Canfield).*

†W. J. Buss, *Asst. An. Husb.*

†J. W. Calland, B. S., *Asst. For.*

†B. E. Carmichael, M. S., *Chief An. Husb.*

†Mabel K. Corbould, *Asst. Chem. (Milling and Baking Tech.).*

†J. J. Crumley, Ph. D., *Asst. For.*

†B. S. Davisson, A. M., *Asst. in Soil Biol.*

†C. W. Ellenwood, *Office Asst. Hort.*

†E. B. Forbes,¹ Ph. D., *Chief of Nutr.*

†C. A. Gearhart, B. S., *Asst. Agron.*

†H. A. Gossard, M. S., *Chief Ent.*

†O. P. Gossard, B. S., *Asst. in Soil Invest.*

†R. I. Grady, B. S., *Asst. in Dairying.*

†S. N. Green, *Field Asst. in Hort.*

†W. J. Green, *Vice Dir., Chief Hort.*

†W. K. Greenbank, *Libr.*

†T. L. Guyton, M. S., *Asst. Ent.*

†J. O. Halverson, Ph. D., *Assoc. in Nutr. (Actg. Chief).*

†J. W. Hammond, M. S., *Assoc. An. Husb.*

†S. C. Hartman, *Supt. Expt. Farms (Marietta).*

†C. C. Hayden, M. S., *Chief in Dairying.*

†William Holmes, *Farm Mgr.*

†J. S. Houser, M. S., *Assoc. Ent.*

†True Houser, B. S., *Asst. Bot. (German-town).*

†J. B. Kell, *Field Asst. in Hort.*

¹ On leave.

†W. H. Kramer, *Bursar*.
 †I. P. Lewis, B. S., *Field Asst. in Hort.*
 †F. M. Lutts, *Supt. Expt. Farms (Norwalk)*.
 †Horatio Markley, *in charge of Exhibits*.
 †J. P. Markley, *Supt. Expt. Farm (Strongs-ville)*.
 †C. W. Montgomery, *Chief Farm Mgt.*
 †L. E. Morgan, M. S., *Asst. in An. Nutr.*
 †E. C. Morr, *Office Asst. in Agron.*
 †D. C. Mote, M. S., *Asst. An. Husb. (Parasitol. Invest.)*.
 †J. B. Park, Sc. D., *Assoc. Agron. (Columbus)*.
 †J. T. Parsons, B. A., *Asst. in Soil Tech.*
 †C. A. Patton, *Asst. Agron., Climat. Observer*.
 †A. E. Perkins, M. S., *Dairy Chem.*
 †T. E. Richmond, M. S., *Asst. Chem.*
 †W. L. Robison, B. S., *Asst. An. Husb.*
 †L. L. Rummell, M. S., *Editor*.
 †C. J. Schollenberger, *Asst. Chem.*

†J. A. Schulz, B. S., *Asst. in Nutr.*
 †Edmund Secrest, B. S., *Chief For.*
 †A. D. Selby, B. S., *Chief Bot.*
 †W. J. Smith, *Supt. Expt. Farms (Mt. Healthy)*.
 †J. R. Stear, B. S., *Asst. Ent.*
 †J. A. Stenius, B. S., *Asst. Chem.*
 †J. A. Sutton, *Supt. Expt. Farm (Findlay)*.
 †J. L. Taggart, *Field Asst. in Hort.*
 †A. E. Taylor, B. S., *Asst. For.*
 †Paul Thayer, M. S., *Asst. Hort.*
 †R. C. Thomas, M. A., *Asst. Bot.*
 †C. M. Timmons, *Office Asst. in Farm Mgt.*
 †Wayne Van Pelt, B. S., *Asst. Bot.*
 †H. M. Wachter, *Supt. Expt. Farm (German-town)*.
 †F. A. Welton, M. S., *Assoc. Agron.*
 †R. D. Whitmarsh,¹ M. S., *Asst. Ent.*
 †C. G. Williams, *Assoc. Dir., Chief Agron. Assoc. in Soil Fert. Invest.*

OKLAHOMA.

Oklahoma Agricultural and Mechanical College and the Agricultural Experiment Station, Stillwater.

*College faculty. †Station staff. ‡Extension staff.

*J. W. Cantwell, M. A., *President*.

*†H. G. Knight, Ph. D., *Dean School of Agr. Dir. of Sta.*

‡J. A. Wilson, B. Agr., *Dir. of Ext. State Agt.*

*†A. C. Baer, B. S., *Dairying; Dairyman*.
 *†M. A. Beeson, D. Sc., *Agron.*
 *E. A. Benbrook, V. M. D., *(Asst.) Physiol., Vet. Sci. Actg. Head of Vet. Sci. Dept.*
 ‡W. D. Bentley, *Asst. Dir. of Ext.*
 *†W. L. Blizzard, B. S., *(Asst.) An. Husb.; Asst. An. Husb.*
 ‡Louis Brannin, B. S., *Live Stock Specialist*.
 ‡M. R. Bryant, B. S., *Field Club Agt.*
 *†C. A. Burns, B. S., *(Asst.) Dairy Husb.; Asst. Dairyman*.
 *C. O. Chambers, Ph. D., *Bot.*
 ‡Emma A. Chandler, B. S., *Asst. State Home Dem. Agt.*
 *†F. B. Cross, B. S., *Instr. Hort.; Asst. Hort.*
 *†Adrian Daane, M. S., *(Asst.) Agron.; Asst. Agron.*
 ‡C. T. Dowell, Ph. D., *Chem.*
 *†Harry Embleton, B. S., *Poultry Husb.*
 ‡W. G. Friedemann, M. S., *Asst. Chem.*
 ‡W. J. Green, B. S., *Asst. Boys' Club Agt.*
 *Avis Gwinn, A. B., *Actg. Head of Dom. Sci. Dept.*
 *Edith Gwinn, B. A., *Instr. Dom. Sci.*
 *E. E. Harnden, B. S., *Asst. in Chem. and Bact.*

‡P. H. Hayes, B. S., *Field Club Agt.*
 *J. T. Horner, B. S., *Instr. Commerce and Marketing*.
 *†D. R. Johnson, M. S., *(Asst.) Agron.; Asst. Agron.*
 *J. G. Kemp, Ph. D., *Phys.*
 *C. D. Learn, M. A., *(Asst.) Bot.*
 *†L. L. Lewis,¹ M. S., D. V. M., *Zool., Vet. Sci.; Vet.*
 *†C. H. McElroy, B. S., *(Asst.) Bact., Actg. Head of Dept.*
 ‡Martha R. McPheeters, B. S., *Asst. Home Dem. Agt.*
 *†J. S. Malone, B. S., *An. Husb.*
 *Ruth E. Michaels,¹ *Dean School of Home Econ.*
 *H. W. Moorhouse, A. B., *Dean School of Commerce and Marketing*.
 *†D. C. Mooring, M. S., *Short Courses*.
 ‡O. J. Moyer, B. S., *Field Club Agt.*
 *J. E. Nance, D. V. S., *Instr. Vet. Med.*
 ‡H. R. Painter, M. S., *Asst. Ent.*
 *L. C. Raiford, Ph. D., *Chem.*
 *†F. M. Rolfs, Ph. D., *Hort.*
 *†C. E. Sanborn, M. A., *Ent.*
 ‡Dorothy Sexauer, B. S., *Asst. Home Dem. Agt.*
 ‡E. B. Shotwell, *Field Club Agt.*

¹ On leave.

†C. M. Smith, *Asst. in charge Poultry Clubs.*

*†Walter Stemmons, B. J., *Editor.*

†J. E. Swaim, *Asst. State Boys' Club Agt.*

*Nora A. Talbot, B. S., *Dom. Art.*

†Dixie B. Tucker, M. D., *Special Agt. in Rural Sanitation.*

*Bernice Waite, M. S., *Asst. in Dom. Sci.*

*Helen Wentworth, B. S., *Instr. Dom. Art.*

*R. O. Whittenton, M. S., (*Assoc.*) *Zool.*

*May L. Whitsitt, M. A., *Instr. Chem.*

†George Wilson, *Agr. for Schools.*

OREGON.

Oregon Agricultural College and the Agricultural Experiment Station, Corvallis.

*College faculty. †Station staff. ‡Extension staff.

*W. J. Kerr, D. Sc., *President.*

*†A. B. Cordley, D. Sc., *Dean School of Agr. Dir. of Sta.*

†O. D. Center, M. S., *Dir. of Ext. Service.*

*Ierne Ahern, B. S., *Asst. in Dom. Sci.*

†L. J. Allen, M. S., *in charge Pig Club Work.*

*†W. M. Atwood, Ph. D., (*Assoc.*) *Bot.; Assoc. Bot.*

*H. P. Barrows, M. S., *Agr. Ed.*

*†A. F. Barss, M. S., *Instr. Hort.; Asst. Hort.*

*†H. P. Barss, M. S., *Bot., Plant Path.*

*†T. D. Beckwith, M. S., *Bact.*

*†A. G. B. Bouquet, B. S., *Veg. Gard.*

*Inez Bozarth, B. S., *Instr. Dom. Sci.*

*†P. M. Brandt, A. M., *Dairy Husb.*

*†C. S. Brewster, B. S., *Instr. Poultry Husb., Specialist in Poultry Husb.*

†G. G. Brown, B. S., *Hort., Hood River Branch Sta., Hood River.*

†W. S. Brown, M. S., (*Ext. Assoc.*) *Hort., Crop Pests.*

†D. E. Bullis, B. S., *Asst. Agr. Chem.*

*†W. J. Chamberlain,¹ B. S., *Instr. Ent.; Asst. Ent.*

*A. C. Chandler, Ph. D., *Instr. Zool., Physiol.*

*V. D. Chappell, M. S., *Asst. in Dairy Husb.*

*Laura Cheney, B. S., *Instr. Dom. Sci.*

†LeRoy Childs, A. B., *Ent., Hood River Branch Sta., Hood River.*

*G. V. Copson, M. S., (*Assoc.*) *Bact.*

†Helen J. Cowgill, B. S., *Asst. State Leader Indus. Clubs.*

*Bertha Davis, M. S., (*Asst.*) *Dom. Sci.*

*Helen L. Davis, A. B., (*Assoc.*) *Dom. Art.*

†H. K. Dean, *Actg. Supt. Umatilla Branch Sta., Hermiston.*

*E. H. Doherty, M. S., *Instr. Agr. Chem.*

*Alice M. Dolman, M. S., (*Asst.*) *Household Administration.*

*†James Dryden, *Poultry Husb.*

†A. E. Engbretson, *Supt. John Jacob Astor Branch Sta., Astoria.*

†E. B. Flitts, (*Assoc.*) *Dairy and An. Husb.*

*†E. J. Fjeldsted, B. S., *Instr. An. Husb.; Asst. in An. Husb.*

*†V. R. Gardner, M. S., *Pomol.*

*Helen M. Gilkey, Ph. D., *Instr. Bot.*

*W. J. Gilmore, B. S., A. E., *Farm Mech.*

†C. E. Hill, B. S., *Asst. at Dry-Farm Branch Sta., Moro.*

*Charlotte N. Hurd, A. M., *Instr. Zool.*

*†G. R. Hyslop, B. S., *Farm Crops.*

*A. Grace Johnson, B. S., (*Asst.*) *Dom. Sci.*

†W. L. Kaddery, B. S., *Asst. State Leader of County Agts.*

*Minnie Kalbus, B. S., *Instr. Dom. Sci.*

†F. W. Kehrli, B. S., *Field Dairyman.*

*Ida A. Kidder, A. B., B. L. S., *Libr.*

*Mary E. Koll, B. S., *Instr. Dom. Sci.*

*†E. J. Kraus, B. S., *Research Hort.*

†J. E. Larson, B. S., (*Assoc.*) *Agron.*

*†F. H. Lathrop, B. S., (*Asst.*) *Ent.; Asst. Ent.*

*†W. E. Lawrence, B. S., (*Asst.*) *Bot.; Asst. Bot.*

*†C. I. Lewis, M. S. A., *Hort. Vice Dir. of Sta.*

*Sarah L. Lewis,¹ B. S., (*Asst.*) *Dom. Sci.*

*†L. F. Lingle, A. B., (*Asst.*) *Hort. Prod.; Asst. in Hort.*

*†A. L. Lovett, B. S., *Ent.*

*P. S. Lucas, B. S., *Instr. Dairy Mfrs.*

*†C. L. McArthur, B. S., (*Asst.*) *Bact.; Asst. Bact.*

*Ralph McBurney,¹ M. S., *Instr. Bact.*

*†C. J. McIntosh, *Instr. News Writing. Editor Ext. Press Buls.*

*M. B. McKay, M. S., (*Asst.*) *Bot.*

*†Hector Macpherson, Ph. D., *Econ., Dir. Bureau of Organization and Markets.*

†P. V. Maris, B. S., *State Leader of County Agts.*

†John Martin, B. S., *Supt. Harney Branch Sta., Burns (Coop. U. S. D. A.).*

*Ava B. Milam, M. A., *Dean School of Home Econ.*

¹ On leave.

- †H. G. Miller, M. S., *Asst. Chem.*
 *Christie Moore, B. S., *Instr. Dom. Sci.*
 *†O. M. Nelson, B. S., (*Assoc.*) *An. Husb.*;
Assoc. An. Husb.
 *C. E. Owens, M. A., (*Asst.*) *Bot.*
 †J. H. Paine, B. S., *Asst. in Poultry*
Husb.
 *A. L. Peck, B. S., *Landsc. Gard., Flor.*
 *Helen Peer, *Instr. Dom. Art.*
 *Cora E. Platt, *Instr. Dom. Art.*
 *†E. L. Potter, B. S., *An. Husb.*
 *†W. L. Powers, M. S., *Irrig., Drainage.*
 *Sara Prentiss, B. S., *Dom. Sci.*
 †F. C. Reimer, M. S., *Supt. Southern Ore-*
gon Branch Sta., Talent.
 *D. E. Richards, B. S., *Instr. An. Husb.*
 *L. E. Robinson, B. S., (*Asst.*) *Rural*
Arch.
 †R. H. Robinson, M. S., *Asst. Chem.*
 *†C. V. Ruzek, B. S., (*Assoc.*) *Soils*;
Assoc. in Soils.
 *Louise A. Schneider, *Instr. Dom. Art.*
 †H. A. Schoth, M. S., *Asst. in Farm*
Crops (Coop. U. S. D. A.).
 *†H. D. Scudder, B. S., *Soils, Farm Mgt.*
 *June Seeley, B. S., *Instr. Dom. Art.*
 †H. C. Seymour, *State Leader of Indus.*
Clubs.

- *†B. F. Sheehan, M. S., *Instr. Farm Crops*;
Asst. in Farm Crops.
 *†B. T. Simms, D. V. M., *Vet. Med.,*
Vet.
 *†G. V. Skelton, C. E., *Highway Engin.*
 †D. E. Stephens, B. S., *Supt. Dry-Farm*
Branch Sta., Moro (Coop. U. S.
D. A.).
 *R. K. Strong, Ph. D., *Indus. Chem.*
 *G. F. Sykes, A. M., *Zool., Physiol.*
 *†H. V. Tartar, B. S., (*Assoc.*) *Agr.*
Chem.; Chem.
 *H. R. Taylor, B. S., *Asst. in Dairy*
Husb.
 *T. A. H. Teeter, B. S., *Irrig. Engin.*
 *D. K. Tressler, A. B., *Instr. Chem.*
 †Anna M. Turley, B. S., (*Asst.*) *Home*
Econ.
 †H. A. Vickers, *Asst. to Dir. Ext. Serv-*
ice.
 †E. L. Westover, B. S., *Specialist in*
Dairy Husb.
 *H. M. Wight, B. S., *Instr. Zool.*
 *L. W. Wing, jr., M. A., *Instr. Dairy*
Husb.
 †Robert Withycombe, B. S., *Supt. East-*
ern Oregon Branch Sta., Union.
 *H. C. Woodham, M. S., *Instr. Pomol.*

PENNSYLVANIA.

The School of Agriculture and Agricultural Experiment Station and the Department of Home Economics of the Pennsylvania State College, State College.

*College faculty. †Station staff. ‡Extension staff.

- *E. E. Sparks, Ph. D., LL. D., *President of College.*
 *†R. L. Watts, D. Agr., *Dean School of Agr. Dir. of Sta.*
 †M. S. McDowell, M. S., *Dir. Agr. Ext. State Leader of County Agts.*
- *†J. F. Adams, M. S., (*Asst.*) *Bot.; Asst.*
Plant Path.
 *Evelyn M. Ancona, B. S., *Instr. Dom.*
Sci.
 *†C. R. Anderson, M. F., (*Asst.*) *For.;*
Asst. For.
 *†E. L. Anthony, M. S., (*Asst.*) *Dairy*
Husb.; Asst. Dairy Husb.
 *H. P. Armsby, Ph. D., LL. D., *An.*
Nutr.
 *†A. L. Beam,¹ M. S., *Instr. Dairy Husb.;*
Asst. Dairy Husb.
 *†S. I. Bechdel, M. S., (*Asst.*) *Dairy*
Husb.; Asst. in Dairy Prod.
 *†J. R. Bechtel, M. S., (*Asst.*) *Veg. Gard.;*
Asst. Hort.
 *†F. L. Bentley, B. S., *Instr. An. Husb.;*
Asst. An. Husb.
 *R. U. Blasingame, M. S., (*Assoc.*) *Farm*
Mech.
 *†A. A. Borland, M. S., *Dairy Husb. Ext.*
 *Elizabeth B. Bower, M. S., (*Asst.*) *Chem.,*
Dom. Sci.
 *†G. S. Bulkley, B. S., (*Ext. Asst.*) *Dairy*
Husb.
 *Marie L. Casteen, B. S., *Instr. Dom.*
Sci.
- *†H. P. Cooper, M. S., *Instr. Agron.;* *Asst.*
Agron.
 *†A. W. Cowell, B. S., *Landsc. Art.*
 *Charles Cummings, B. S., *Asst. in Dairy*
Husb.
 *†W. H. Darst, B. S., (*Asst.*) *Agron.;*
Asst. Agron.
 *†E. E. De Turk,¹ M. S., (*Asst.*) *Agr.*
Chem.; *Asst. Agr. Chem.*
 *†H. D. Edmiston, *Asst. in Agr. Ext.*
 *Faith W. Elliott, B. S., *Instr. Institu-*
tional Mgt.
 *†John Ellis, *Gardener (Bot.).*
 *†J. N. Else, B. S., *Asst. in Agron.*
 *†E. S. Erb, M. S., *Assoc. Chem.*
 *†F. N. Fagan, B. S., (*Asst.*) *Pomol.;*
Asst. Pomol.
 *A. A. Farnham, B. S., *Instr. in Landsc.*
Gard.
 *†J. A. Ferguson, M. A., M. F., *For.*
 *†S. W. Fletcher, Ph. D., *Hort.*
 *†D. S. Fox, Ph. D., (*Asst.*) *Agron.;* *Asst.*
Agron.
 *†William Frear, Ph. D., *Expt. Agr. Chem.*
Vice Dir. of Sta.
 *Ella V. Foresman, R. N., *Instr. Home*
Nursing.

¹ On leave.

- *†J. M. Fry, B. S., *Asst. in Agr. Ext.*
 *†F. D. Gardner, B. S., *Agron.*
 *†J. S. Gardner, B. S., *Instr. Plant Brdg.; Asst. in Plant Brdg.*
 *Mildred M. Gardner, *Asst. in Dom. Art.*
 *†C. L. Goodling, M. S., (*Asst.*) *Farm Mgt.; Supt. of Farms.*
 *†W. R. Gorham, B. S., (*Asst.*) *Agr. Ext.*
 *†Julia C. Gray, *Libr., Editor.*
 *†G. R. Green,¹ M. S., (*Asst.*) *For.; Asst. For.*
 *†M. F. Grimes, B. S., (*Asst.*) *An. Husb.; Asst. An. Husb.*
 *†A. R. Haas,¹ M. S., *Instr. Bot.; Asst. Bot.*
 *†C. H. Hadley, jr., B. S., *Instr. Ent. Ext.*
 *†D. E. Haley, M. S., (*Asst.*) *Agr. Chem.; Asst. Agr. Chem.*
 *†H. H. Havner, M. S., D. V. M., (*Assoc.*) *An. Husb. Ext.*
 *†E. K. Hibshman, B. S., *Farm Organization Ext. and Asst. State Leader of County Agts.*
 *†J. B. Hill, Ph. D., (*Assoc.*) *Bot.; Asst. Bot.*
 †F. J. Holben, B. S., *Asst. in Expt. Agron.*
 *†F. S. Hultz, M. S., *Asst. An. Husb.*
 *†C. A. Hunter, M. S., (*Asst.*) *Bact.; Asst. Bact.*
 *L. D. Jesseman, A. M., *Instr. Pomol.*
 *†J. P. Kelly, M. A., *Instr. Bot.; Asst. Bot.*
 *†F. D. Kern, Ph. D., *Bot.*
 *†L. S. Kleinschmidt, M. S., *Instr. Poultry Husb.; Asst. Poultry Husb.*
 *†H. C. Kandel, B. S., *Instr. Poultry Husb. Ext.*
 *†F. P. Knoll, *Asst. in Dairy Mfrs.*
 *M. D. Leonard, B. S., *Instr. Ent. (Girard).*
 *M. W. Lisse, M. S., (*Asst.*) *Agr. Chem.*
 *Sara C. Lovejoy, B. A., *Dir. Dept. of Home Econ.*
 *†C. G. McBride, B. S., (*Asst.*) *Agr. Ext.*
 *†C. W. McDonald, B. S., *Asst. in An. Husb.*
 *†Margaret B. MacDonald, Ph. D. (*Assoc.*) *Agr. Chem.; Asst. Agr. Chem.*
 *†Pearl MacDonald, B. S., (*Asst.*) *Home Econ. Ext.*
 *†T. I. Mairs, M. S., *Agr. Ed. and Supt. Corresp. Courses.*
 *†A. F. Mason, M. S., (*Asst.*) *Hort. Ext.*
 *†Elizabeth B. Meek,¹ M. S., (*Asst.*) *Bact.; Asst. Bact.*
 *†J. W. Miller, M. S., *Asst. Bot.*

- *†E. L. Moffitt, B. S., (*Asst.*) *Farm Mgt. Ext.*
 *†C. E. Myers, M. S., (*Assoc.*) *Plant Brdg.; Assoc. Hort.*
 *†M. Jane Newcomb, B. S., *Instr. Home Econ. Ext.*
 †E. L. Nixon, B. S., *Ext. Plant Path.*
 *†C. F. Noll, M. S., (*Assoc.*) *Expt. Agron.; Asst. Expt. Agron.*
 *†C. R. Orton, M. S., (*Assoc.*) *Bot.; Asst. Bot.*
 *†L. O. Overholts, Ph. D., (*Asst.*) *Bot.; Mycol.*
 *H. G. Parkinson, M. S., (*Asst.*) *Rural Ed.*
 *†Martha S. Pittman, B. S., *Instr. Home Econ. Ext.*
 *†C. F. Preston, B. S., (*Asst.*) *Farm Organization Ext.*
 *†F. S. Putney,¹ M. S., (*Assoc.*) *Expt. Dairy Husb.; Asst. Dairy Husb.*
 *Edith S. Ranney, *Instr. Dom. Art.*
 *†Fred Rasmussen, B. S., *Dairy Husb.*
 *†J. B. Scherrer,¹ B. S., (*Asst.*) *Veg. Gard. Ext.*
 *†Nickolas Schmitz, M. S., (*Ext.*) *Agron.*
 *†B. O. Severson,¹ M. S., (*Assoc.*) *An. Husb.; Asst. An. Husb.*
 *†R. S. Smith,¹ M. S. A., (*Asst.*) *Agron.; Asst. Agron.*
 *†R. S. Spray, M. S., *Instr. Bot.; Asst. Bot.*
 *†J. P. Stewart, Ph. D., *Expt. Pomol.*
 *†C. W. Stoddart, Ph. D., *Agr. Chem.*
 *†W. D. Swope, *Asst. Dairy Husb.*
 *†Walter Thomas, B. S., *Assoc. Chem.*
 *†W. H. Tomhave, B. S., *An. Husb.*
 *†L. C. Tomkins, *Instr. Agr. Ext.*
 *†R. C. Walton, B. S., *Instr. Plant Path.; Asst. Plant Path. (Arendtsville).*
 *†F. P. Weaver, M. S., *Instr. Farm Organization Ext.; Asst. State Leader of County Agts.*
 *†J. W. White, M. S., (*Assoc.*) *Expt. Agron.; Assoc. Agron.*
 *W. R. White, M. S., (*Asst.*) *Agr. Ed.*
 *†E. J. Wilde, M. S., (*Asst.*) *Flori.; Asst. Hort.*
 *†I. D. Wilson, D. V. M., *Instr. An. Husb.; Asst. An. Husb.*
 *†D. C. Wimer, B. S., *Instr. Agron.; Asst. Agron.*
 *†W. W. Wood, B. S., *Instr. Agr. Ext.*
 *†E. L. Worthen, M. S., (*Assoc.*) *Agron.; Asst. Agron.*
 *†A. F. Yeager, M. S., *Instr. Pomol.; Asst. Pomol.*
 *H. C. Yerger, jr., M. S., *Instr. Dairy Mfrs.*

Institute of Animal Nutrition of Pennsylvania State College, State College.

†Institute staff.

†H. P. Armsby, Ph. D., LL. D., *Director.*

- †W. W. Braman, M. S., *Assoc. in An. Nutr.*
 †D. C. Cochrane,¹ B. S., *Assoc. in An. Nutr.*
 †J. A. Fries, M. S., *Asst. Dir.*

- †J. E. Isenberg, M. S., *Asst. in An. Nutr.*
 †M. C. Lewis, B. S., *Asst. in An. Nutr.*
 †C. R. Moulton, Ph. D., *Asst. in An. Nutr.*
 †E. W. Schmidt,¹ B. S., *Asst. in An. Nutr.*

PORTO RICO.

College of Agriculture and Mechanic Arts of the University of Porto Rico,
Mayaguez.

*College faculty.

*P. G. Miller, Ph. D., *President of University* (Rio Piedras).*R. S. Garwood, A. M., *Dean of College*.*Jaime Bagué, D. V. M., *Instr. An. Husb.*
*and Vet. Sci.**H. T. Cowles, B. S., (*Asst.*) *Hort.**A. J. Fredholm, Sc. D., D. Agr., *Vcg.*
*Path., Tropical Crops.**R. I. Garton, Sc. D., *Instr. Zool., Ent.**Fernando Margarida, B. S., *Instr. Chem.**Elena R. Prats, B. S., *Instr. Bot.*

Agricultural Experiment Station, Mayaguez.

Under the supervision of the Office of Experiment Stations, States Relations Service,
United States Department of Agriculture.

†Station staff. ‡Extension staff.

†D. W. May, M. Agr., *Agronomist in charge*.†E. W. Brandes,¹ M. S., *Plant Path.*†J. O. Carrero, B. S., Ch. E., *Asst. Chem.*†P. L. Gile, A. B., *Chem.*†H. C. Henriksen, B. Agr., *Specialist in*
Farm Mgt. (San Juan).
———, *Hort.*†T. B. McClelland, A. B., *Asst. Hort.*†W. A. Mace, B. A., *Agr. Tech.*†W. P. Snyder,¹ B. S., *Asst. in Plant*
Brdg.†H. E. Thomas,¹ M. S., *Asst. Plant Path.*†W. V. Tower, B. S., *Ent.*

Insular Experiment Station, Rio Piedras.

Under the control of the Department of Agriculture and Labor of Porto Rico.

†Station staff.

†Edmundo Colón, M. S., *Director*.†R. T. Cotton,¹ M. S., *Ent.*†H. B. Cowgill, M. S., *Plant Breeder*.†F. A. López, B. S., *Chem.*†Bienvenido Matienzo, B. S., *Hort.*†R. C. Rose,¹ M. S., *Asst. Plant Path.*†R. C. Silva, *Translator*.†E. G. Smyth, *Ent.*†J. A. Stevenson, B. S., *Bot., Plant Path*†Rafael Vilá, Ph. C., *Asst. Chem.*

RHODE ISLAND.

Rhode Island State College and the Agricultural Experiment Station,
Kingston.

*College faculty. †Station staff. ‡Extension staff.

*Howard Edwards, M. A., LL. D., *President*.*†B. L. Hartwell, Ph. D., *Dtr. of Sta. Agr. Chem. (*) Agron., Chem. (†)*†A. E. Stene, M. S., *Dir. Ext. Service. State Leader of County Agents.**G. E. Adams, B. S., *Agron. Dean of*
*Agr. Dept.**Laura Anderson, B. S., *Instr. Dom. Art.**John Barlow, M. A., *Zool.**Bessie E. Bemis, B. S., *Home Econ.**Howland Burdick, B. S., (*Asst.*) *Dairy-*
ing and Farm Mach., Mgr. Farm.†Dorothy W. Caldwell, M. S., *Asst. An.*
*Brdg., Path.**C. L. Coggins, B. S., (*Asst.*) *Phys.*†R. B. Cooley, B. S. A., *Specialist in*
*Dairy Husb.**P. E. Corriveau,¹ A. M., *Instr. Hort.*†F. K. Crandall, B. S., *Asst. in Field*
Expts.†S. C. Damon, B. S., *Asst. in Field*
*Expts.**F. J. Godin, B. S., *Instr. Hort.**†P. B. Hadley, Ph. D., *Bact.; An. Brdg.,*
Path.†Nathaniel Helme, *Met.**J. E. Ladd, M. S., *An. Husb.*†D. J. Lambert, *Poultry Husb.**V. L. Leighton, Ph. D., *Chem.*¹ On leave.

†Gladys E. Meloche, B. S., *Home Dem. Leader.*

†G. E. Merkle, B. S., *Asst. Chem.*

*Harriet L. Merrow, M. A., *Bot.*

*Helen E. Peck, A. B., *Libr.*

*T. A. Palmer, B. S., *Poultry Husb.*

†F. R. Pember, M. S., *Assoc. in Glass-house Expts.*

*E. H. Perkins, B. S., *Instr. Geol., Chem.*

*F. H. Smith, M. S., *Chem.*

‡E. K. Thomas, *State Club Leader.*

†P. H. Wessels, M. S., *Assoc. Chem.*

SOUTH CAROLINA.

Clemson Agricultural College and the Agricultural Experiment Station,
Clemson College.

*College faculty. †Station staff. ‡Extension staff.

*W. M. Riggs, E. and M. E., LL. D., *President. Consulting Engin. (*)*

*†‡H. W. Barre, M. A., *Dir. of Sta. Bot., Bact. (*) Bot., Plant Path. (†) (State Path.)*

†W. W. Long, M. S., *Dir. of Ext. Div. State Agent Farm Dem. Work.*

*†G. M. Armstrong, M. S., *Instr. Bot.; Asst. Bot.*

*W. B. Aull, B. S., (*Asst.*) *Bact.*

*W. A. Barnett, D. V. M., (*Asst.*) *Vet. Sci.*

†J. A. Berly, B. S., *Asst. Ent.*

*R. N. Brackett, Ph. D., *Dir. Chem. Dept. (State Chem.).*

*L. B. Brandon, B. S., *Foreman Coll. Farm.*

*W. F. Burleigh, D. V. M., *Asst. State Vet.*

*F. H. H. Calhoun, Ph. D., *Geol. Dir. of Resident Teaching.*

*†O. M. Clark, B. S., (*Asst.*) *Agron.; Asst. Agron.*

*J. A. Clutter, M. S., (*Asst.*) *Dairy Mfrs.*

*†‡A. F. Conradi, M. S., *Ent., Zool.; Ent. (State Ent.).*

†H. T. Converse, B. S., *Asst. in Dairy Husb. (Detailed U. S. D. A. Spartanburg.)*

*†F. J. Crider, M. S. A., (*Assoc.*) *Hort.; Assoc. Hort.*

†R. E. Currin, *Supt. Pee Dee Substa., Florence.*

†W. O. Davis, B. S., *Asst. in Hort.*

†S. W. Evans, *Treas.*

†R. C. Faulwetter, B. A., *Assoc. Bot., Plant Path.*

*†R. O. Feeley, D. V. S., *Vet. Sci.; Consult. Vet. (State Vet.).*

*†W. W. Fitzpatrick, B. S., *Dairying; Chief of Dairy Div.*

*Benjamin Freeman, B. S., *Asst. in Chem.*

†W. D. Garrison, B. S., *Supt. Coast Land Sta., Summerville.*

†W. P. Gee, Ph. D., *Asst. Dir. Ext. Div.*

†Burns Gillison, *Supt. Expt. Farm.*

†E. E. Hall, M. S., *Cotton Breeding.*

*†F. C. Hare, *Poultryman, Poultry Dem. Expert.*

*D. H. Henry, B. S., (*Assoc.*) *Chem.*

‡G. P. Hoffmann, B. S., *Asst. in Hort.*

‡F. W. Hoffmann, M. A., *Market Agt. (Detailed U. S. D. A.).*

*†W. L. Hutchinson, M. S., *Agron.; Assoc. Agron.*

*C. F. Inman, B. S., *Instr. Chem.*

*†‡T. E. Keitt, B. S., *Soils; Chem.*

†L. H. Leonian, M. S., *Research Asst. in Hort.*

*†H. G. Lewis, B. S., (*Assoc.*) *Soils and Chem.; Asst. Chem.*

*G. F. Lipscomb, Ph. D., (*Asst.*) *Chem.*

*J. H. Mitchell, M. S., (*Asst.*) *Chem.*

†C. E. Newlander, B. S., *Dairy Mfg. Specialist.*

*†‡C. C. Newman, B. S., *Hort. In charge Coll. Farm.*

*†T. D. Padgett, B. S., *Instr. Soils; Asst. Chem.*

*Vord Peterson, A. B., *Agr. Ed.*

*T. G. Poats, M. E., E. E., *Phys.*

*E. H. Pressley, B. S., *Asst. in Agron., Farm Mach.*

*D. B. Rosenkrans, M. A., (*Asst.*) *Bot., Bact.*

*†T. A. Rouse, B. S., (*Asst.*) *An. Husb., Asst. An. Husb.*

†J. L. Seal, M. S., *Ext. Field Path.*

†H. E. Shiver,¹ B. S., *Asst. Chem.*

*†‡R. L. Shields, B. S. A., *An. Husb.; Chief An. Husb.*

*W. E. Speas, A. M., *Instr. Phys.*

†F. G. Tarbox, jr., B. S., *Corn Brdg. Expert.*

*†W. A. Thomas, B. S., (*Asst.*) *Ent., Zool.; Asst. Ent.*

*Katherine B. Trescott, *Libr.*

†D. W. Watkins, B. S., *Asst. in Dairy Husb. (Detailed U. S. D. A. Greenville.).*

†J. O. Williams, B. S. A., *Live Stock Expert (Detailed U. S. D. A.).*

¹ On leave.

State Agricultural and Mechanical College of South Carolina, Orangeburg.

*College faculty. ‡Extension staff.

*†R. S. Wilkinson, Ph. D., *President. In charge Ext. Work.*‡Mrs. Mattie J. Battiste, *Ext. Worker in Home Econ.**C. Clara Davis, *Instr. Sewing.**Julia V. Garbon, *Instr. Cooking, Dietetics.**Bessie J. Green, *Instr. Nature Study.**Mrs. Cornelia J. Gregg, *Instr. Dom. Econ.**J. W. Harper, A. B., *Rural Econ. and Agr. History.**B. F. Hubert, B. S., *Head Agr. and Rural Ed. Dept.**Aurelia Lanier, *Instr. Farm Accounting.**E. A. Lawrence, A. B., *Rural Sociol.**T. J. Lyles, B. S., *Instr. Dairying.**Mattie L. Mays, R. N., *Rural Sanitation and Home Nursing.**†S. M. Pinckney, B. S., *Instr. Farm Dem. and An. Indus.**F. M. Staley, B. S. A., *Instr. Dairying.**Julia M. Williams, *Instr. Dom. Art.*‡Marion R. Wilkinson, *State Home Econ. Worker.**T. J. Williamson, B. S., *Agr. Chem.***SOUTH DAKOTA.****South Dakota State College of Agriculture and Mechanic Arts and the Agricultural Experiment Station, Brookings.**

*College faculty. ‡Station staff. ‡Extension staff.

*E. C. Perisho, M. S., LL. D., *President.**†J. W. Wilson, M. S. A., *Dir. of Sta. An. Husb. (*†)*‡Christian Larsen, M. S. A., *Dir. of Ext. Div.**Edward Binnewies, M. S., (*Asst.*) *Chem.**G. L. Brown, Ph. D., *Dean and Vice Pres.**Ada B. Caldwell, *Indus. Art.**†Manley Champlin, M. S., (*Asst.*) *Agron.; Asst. Agron. (Coop. U. S. D. A.).**Wilson Cramer, jr., *Instr. An. Husb.*‡H. E. Dawes, *Asst. Supt. Short Courses.*‡J. T. Dinwoodie, D. V. M., *Vet. Specialist.**B. A. Dunbar, A. M., (*Assoc.*) *Chem. Actg. Head of Dept.**J. M. Eldridge, B. S., *Instr. Dairy Husb.**Ada Erwin, B. S., *Instr. Home Econ.**†Matthew Fowlds, B. S., *Asst. Agron.**†George Gilbertson, M. S., *Instr. Ent.**Maud Goddard, (*Asst.*) *Indus. Art.**†N. E. Hansen, D. Sc., *Hort., For. Vice Dir. Sta.**A. S. Harding, A. M., *Rural Sociol., Econ.**Anton Hogstad, jr., Ph. C., *Instr. Bot.**H. H. Hoy, M. S., (*Assoc.*) *Phys.**†A. N. Hume, Ph. D., *Agron. Supt. Substas.**†E. H. Hungerford,¹ M. S., *Asst. Dairy Husb.**††J. G. Hutton, M. S., (*Assoc.*) *Agron.; Assoc. Agron.*‡I. B. Johnson, B. S., *State Leader of County Agts.*†R. A. Larson, *Sec.**Louise L. Leaton, B. S., *Instr. Home Econ.**C. C. Lipp, D. V. M., *Vet. Med.*‡Howard Loomis, B. A., *Asst. Agron.*‡F. E. McCall, B. S., *Hort. Specialist.*‡W. M. Mair, *Supt. Boys' and Girls' Clubs.**H. B. Mathews, M. S., *Phys.*†T. A. Meehan, *Dairy Specialist.**C. W. Michel, M. A., *Bot.**S. P. Miller, A. M., *Zool., Rural Sanitation.*‡G. E. Morrison, B. S., *Live Stock Specialist.*†J. D. Morrison, M. S., *Crop Work, Highmore Substa. (Coop. U. S. D. A.).*‡Agnes Morton, B. S., *Asst. Club Leader.*‡W. A. Ostrander, M. S., *Farm Mgt.*‡R. L. Patty, B. S., *Agr. Engin. Specialist.**W. H. Powers, M. A., *Libr.**†H. C. Severin, M. A., *Ent. (State Ent.).**†R. C. Sherwood, M. S., *Asst. Chem.**G. A. Starring, A. B., *Agr. Editor.**E. D. Stivers, B. S., *Prim. Secen. School of Agr. Dir. of Summer School.**†F. C. Stoltenberg, *Asst. Hort., Florist.**Catherine Swift, *Instr. Home Econ.**B. L. Thompson, B. S., (*Assoc.*) *An. Husb.**Mabel Ward, B. S., *Home Econ.**†T. H. Wright, jr., B. S., *Instr. Dairy Husb.; Asst. Dairy Husb.*¹ On leave.

TENNESSEE.

College of Agriculture and the Agricultural Experiment Station of the
University of Tennessee, Knoxville.

*College faculty. †Station staff. ‡Extension staff.

*Brown Ayres, Ph. D., LL. D., D. C. L., *President of University.**†H. A. Morgan, B. S. A., *Dean Coll. of Agr. Dir. of Sta. Zool., Ent. (*†)*‡C. A. Keffer, M. S., *Dir. Div. of Agr. Ext.*†C. E. Allred, M. S., *Asst. Specialist in Agron.*†James Arentson, B. S. A. E., *Specialist in Farm Mach.**†S. M. Bain, A. B., *Bot.*†H. E. Baker, B. S. A., *Asst. Dairy Specialist.*†C. E. Bartholomew, M. S., *Bee Specialist (Detailed U. S. D. A.).**†G. M. Bentley, M. A., (Assoc.) *Zool., Ent.; Assoc. Ent. (State Ent.).*†C. E. Brehm, B. S., *Specialist in Markets and Rural Organization.*†F. H. Broome, *Libr., Sec.*†O. A. Campbell, *Asst. in Plat Work, Jackson.*†W. A. Campbell, *Farm Foreman.**H. H. Clark, M. A., *Rural Econ.*†J. E. Converse, *Asst. in Coop. Expts., Crossville.*†Mary G. Conway, M. A., *Specialist in Home Econ.*†R. N. Crane, B. Agr., *Specialist in Poultry Husb.**Nellie Crooks, (Assoc.) *Dom. Art.*†S. H. Essary, M. S., *Asst. Bot., Mycol.**Lucy E. Fay, A. M., B. L. S., *Libr.**C. H. Gordon, Ph. D., *Geol.**W. E. Grainger, B. S., *Asst. in Chem.**Lena B. Henderson, B. S., *Instr. Bot.**C. O. Hill, Ph. C., M. S., (Assoc.) *Org. and Agr. Chem.*†W. A. Holding, B. S., *Asst. Chem.*†C. M. Hume, B. S., *Asst. in Coop. Expts., Murfreesboro.*†C. A. Hutton, B. S. A., *Specialist in Dairy Husb.**Moses Jacob, V. M. D., *Vet. Sci.*†C. D. Lowe, D. V. M., *Asst. Specialist in An. Husb.**R. B. Lowry, B. S., *Instr. Agron.*†J. C. McAmis, B. S. A., *Specialist in Agron.*†W. H. McIntire, Ph. D., *Soil Chem.**Cora M. Massey, A. B., *Instr. Home Econ.*†R. H. Milton, *Supt. Tobacco Sta., Clarks-ville (Coop. U. S. D. A.).*†C. A. Mooers, B. S., *Chem., Agron.*‡Virginia P. Moore, L. T., *Asst. Dir. Home Dem. Work.**†Maurice Mulvania, M. S., (Asst.) *Bact.; Bact.*†R. M. Murphy, M. S., *Specialist in An. Husb.**J. T. Porter, Ph. D., *Phys.*†H. B. Potter, B. S., *Editor Ext. Pubs.*†S. A. Robert, B. S., *Supt. West Tenn. Sta., Jackson.*†W. N. Rudd, *Asst. in Coop. Expts., Mo-Minnville.**A. A. Schaeffer, Ph. D., (Assoc.) *Zool*‡W. A. Schoenfeld, B. S., *Asst. Dir. Div. of Agr. Ext.*†W. G. Shaw, V. M. D., *Vet.*†S. M. Spangler, *Asst. in Plat Work.*†G. N. Tobey, *Cheese Specialist.**Louise G. Turner, M. A., (Asst.) *Dom. Sci.**†J. F. Voorhees, B. S. A., *Instr. Met.; Consult. Met.**C. E. Wait, C. E., M. E., Ph. D., *Gen. and Anal. Chem.*†Mrs. Lena A. Warner, R. N., *Specialist in Home Sanitation.**†O. M. Watson, B. S. A., (Asst.) *Hort.; Hort.*†H. R. Watts, B. S., *Asst. Ent.*†L. G. Willis, B. S., *Asst. Chem.**†C. A. Willson, M. S. A., *An. and Dairy Husb.**C. E. Wylie, M. A., (Asst.) *Dairying.*

Tennessee Agricultural and Industrial State Normal School. Nashville.

*College faculty.

*W. J. Hale, *President.**B. W. P. Allen, A. B., *Phys., Chem.**Miss N. B. Benson, *Nurse Training, House-keeping.**Clara Brown, *Handicraft, Plain Sewing.**Martha Brown, *Applied Dom. Sci.**Miss L. H. McAdams, *Housekeeping.**Mrs. Ethel McGhee, *Dom. Sci.**Miss H. H. Mayo, *Dom. Sci.**C. Olga Mitchell, *Dom. Art.**G. W. Senters, *Applied Agr.**J. L. White, A. B., *Agr.**Everitt Yates, B. S., *Asst. in Agr.*

TEXAS.

Agricultural and Mechanical College of Texas and the Agricultural Experiment Station, College Station.

*College faculty. †Station staff. ‡Extension staff.

*W. B. Bizzell, M. A., D. C. L., *President.*†B. Youngblood, M. S., *Dir. of Sta.*‡Clarence Ousley, *Dir. Ext. Service. State Agent.*

- *R. A. Andree, M. S., *Agr. Engin.*
- *C. H. Arndt, M. S., (*Asst.*) *Biol.*
- *O. M. Ball, Ph. D., *Biol.*
- *F. W. Bell, B. S., (*Assoc.*) *An. Husb.*
- ‡Harmon Benton, M. S., *Agron.*
- *C. A. Berg, *Asst. in Agr. Engin.*
- *E. O. Bethell, D. V. M., (*Asst.*) *Vet. Med.*
- *S. W. Bilsing, M. A., (*Actg.*) *Ent.*
- †F. H. Blodgett, Ph. D., *Plant Path. (Stephenville).*
- *H. R. Brayton, M. S., (*Assoc.*) *Chem.*
- †W. T. Brink, B. S., *Tech. Asst. to Dir., Editor.*
- *Otto Brown, M. S., (*Asst.*) *Hort.*
- *W. A. Broyles, M. A., (*Assoc.*) *Agr. Ed.*
- *C. W. Burchard, A. M., (*Asst.*) *Chem.*
- *†L. B. Burk, B. S., (*Assoc.*) *An. Husb.; Swine Invest.*
- *†J. C. Burns, B. S., *An. Husb.; Feeding Invest.*
- *E. G. Campbell, M. S., (*Asst.*) *Biol.*
- *Hugh Cassidy, M. A., (*Asst.*) *Biol.*
- †W. F. Christian, *Executive Sec., Feed Control Service.*
- †J. B. Cockrell, B. S., *Sci. Asst., Substa. No. 4, Beaumont.*
- ‡W. W. Coll, *Sheep Specialist.*
- †A. B. Conner, B. S., *Agron. in charge, Vice Dir. Sta.*
- *T. J. Conway, B. S., (*Asst.*) *An. Husb. (Poultry Work).*
- †I. E. Cowart, M. A., *Supt. Substa. No. 1, Beeville.*
- †A. B. Cron, B. S., *Supt. Substa. No. 12, Chillicothe (Coop. U. S. D. A.).*
- †R. E. Dickson, B. S., *Supt. Substa. No. 7, Spur.*
- †W. A. Doubt, *Dairyman in charge.*
- *J. F. H. Douglas, Ph. D., (*Asst.*) *Phys.*
- *R. C. Dunn, D. V. M., (*Assoc.*) *Vet. Med.*
- ‡H. M. Elliot, M. A., *Chief in Rural Econ.*
- ‡C. M. Evans, M. S. A., *Chief in An. Husb.*
- ‡J. A. Evans, *Pecan Specialist, Arlington.*
- ‡G. D. Everett, *Garden Specialist.*
- †P. V. Ewing, M. S., *An. Husb. in charge Swine Invest.*
- *C. H. Farr, Ph. D., (*Asst.*) *Biol.*
- ‡J. H. Ford, *Agron., Negro Work, Prairie View.*
- *†J. H. Foster, M. F., *For.; For. in charge. (State For.)*

- *†Mark Francis, D. V. M., *Vet. Anat. Dean School of Vet. Med.; Vet. in charge.*
- †G. S. Fraps, Ph. D., *Chem. in charge. (State Chem.)*
- †F. D. Fuller, M. S., *Chief, Feed Control Service.*
- †D. T. Griswold, B. S., (*Assoc.*) *An. Husb.*
- †V. E. Hafner, B. S., *Sci. Asst., Substa. No. 12, Chillicothe.*
- ‡R. M. Harkey, *Special Agt. in Organization.*
- †R. N. Harvey, B. S., *Poultryman in charge.*
- *H. E. Hayden, jr., M. A., (*Assoc.*) *Biol.*
- *M. L. Hayes, A. M., *Agr. Ed.*
- ‡M. E. Hays,¹ A. M., *Ent.*
- *C. C. Hedges, Ph. D., *Chem.*
- ‡Kate L. Henley, *Asst. State Agt. Home Dem. Work.*
- *F. W. Hensel, jr., M. S., (*Assoc.*) *Hort.*
- †W. S. Hotchkiss, *Hort. and Supt. Substa. No. 2, Troup.*
- †E. P. Humbert, Ph. D., *Plant Breeder in charge.*
- ‡Mrs. M. E. Hunter, *Home Econ. Dem. for Negro Women, Prairie View.*
- †J. W. Jackson, B. S., *Supt. Substa. No. 9, Pecos.*
- ‡Mrs. N. P. Jackson, A. M., *Leader Rural Women's Work.*
- †W. E. Jackson, B. S., *Asst. Ent.*
- †J. M. Jones, M. A., *An. Husb. Brdg. Invest.*
- †R. E. Karper, B. S., *Supt. Substa. No. 8, Lubbock.*
- ‡F. W. Kazmeyer, *Poultry Husb.*
- †D. T. Killough, B. S., *Supt. Substa. No. 5, Temple.*
- *J. E. Kimmel, jr., Ph. C., *Instr. Chem.*
- *W. W. Kraft, B. S., *Instr. Phys.*
- *H. B. Krausz, *Instr. For.*
- *E. J. Kyle, M. S. A., *Hort. and Dean School of Agr.*
- †W. B. Lanham, B. S., *Chief in Plant Indus.*
- †H. H. Laude, B. S., *Supt. Substa. No. 4, Beaumont.*
- †A. H. Leidigh, B. S., *Agron.*
- †C. H. McDowell, B. S., *Supt. Substa. No. 6, Deaton.*
- *N. M. McGinnis, B. S., (*Assoc.*) *Hort.*

¹ On leave.

- †H. L. McKnight, *Special Agt. in Organization.*
 *S. A. McMillan, B. S., (*Assoc.*) *Agron.*
 †G. T. McNess, *Supt. Substa. No. 11, Nacogdoches.*
 *W. H. McPheters, B. S., (*Asst.*) *Phys.*
 *W. T. Magee, B. S., (*Asst.*) *An. Husb.*
 *R. P. Marsteller, D. V. M., *Vet. Med. and Surg.*
 *J. O. Morgan, Ph. D., *Agron.*
 †Laura F. Neale, *State Agt. Home Econ. Work.*
 †Helge Ness, M. S., *Hort. in charge.*
 †J. C. Olson, B. S. A. E., *Agr. Engin.*
 †F. B. Paddock, M. S., *Ent. in charge. (State Ent.)*
 †S. D. Pearce, *Insp. Feed Control Service.*
 †Walton Petet, *Special Agt. in Organization.*
 †E. M. Peters, B. S., *Actg. Supt. Substa. No. 11, Sonora.*
 †Edith H. Phillips, B. S., *Sci. Asst., Illustrator.*
 *A. T. Potts, M. S., (*Assoc.*) *Hort.*
 †R. L. Pou, M. S., *Dairy Husb.*
 *Charles Puryear, M. A., C. E., LL. D., *Dean of College.*
 †Pinkie R. Rambo, *Home Econ. Dem. for Negro Women, Prairie View.*
 *A. B. Ray,¹ Ph. D., (*Assoc.*) *Chem.*
 †H. J. Reinhard, B. S., *Asst. Ent.*
 *A. W. Reynolds, B. S., (*Asst.*) *Dairy Husb.*
 *Leroy Rhodes, B. S., (*Asst.*) *Agr. Engin.*
 *J. W. Ridgway, M. S., *Dairy Husb.*
 *H. B. Riffenburg, M. A., *Instr. Chem.*
 †J. H. Rogers, *Insp. Feed Control Service.*

- †H. Schmidt,¹ D. V. M., *Vet.*
 *D. R. Semmes, Ph. D., (*Assoc.*) *Geol.*
 *O. W. Silvey, Ph. D., *Phys.*
 †Cornelia A. Simpson, *Home Econ. Dem.*
 *F. J. Skeeler, B. S., (*Asst.*) *Phys.*
 †R. L. Smith, *Leader in Negro Work, Waco.*
 †E. R. Spence, B. S., *An. Husb. in charge of Farm (Feeding and Brdg. Substa., No. 10).*
 †W. T. P. Sprott,¹ B. S., *Asst. Chem.*
 *W. L. Stangel, A. M., *Instr. An. Husb.*
 *W. A. Stone, B. S., (*Asst.*) *Chem.*
 *A. D. Suttle, B. S., *Instr. Farm Crops.*
 †J. J. Taubenhaus, Ph. D., *Plant Path. and Physiol. in charge.*
 †J. L. Thomas, *Specialist in Dairy Mfrs. (Coop. U. S. D. A.).*
 *L. P. Thomas, *Instr. Dairy Husb.*
 †T. O. Walton, *Asst. Dir. Ext. Service.*
 †A. S. Ware, *Sec. of Sta.*
 †Louis Wermelskirchen, B. S., *Agron.*
 *C. C. Whitney, V. M. D., (*Asst.*) *Vet. Path.*
 †W. M. Wickes, *Insp. Feed Control Service.*
 †H. H. Williamson, B. S., *State Agt. in Club Work.*
 †N. E. Winters, B. S., *Supt. Substa. No. 3, Angleton.*
 *A. E. Wood, M. S., (*Assoc.*) *Chem.*
 †A. T. Wood, *Agron., Negro Work (Prairie View).*
 *C. A. Wood, M. S., (*Assoc.*) *Agron.*
 †W. H. Wood, *Insp. Feed Control Service.*
 *H. C. Yingling, M. S., *Instr. Ent.*

Prairie View State Normal and Industrial College, Prairie View.

*College faculty.²

*I. M. Terrell, A. M., *Principal.*

- *Mayme Atherton, *Asst. in Cooking.*
 *P. E. Bledsoe, B. S., *Phys., Chem.*
 *G. W. Buchanan, *Libr.*
 *Ruth E. Cox, *Asst. in Sewing.*
 *Miss C. B. Drisdale, *Sewing, Millinery.*
 *A. D. Ewell, *Foreman Laundry.*
 *Mrs. R. L. Ewell, *Asst. in Laundry.*

- *Katie V. Fulton, *Asst. in Sewing.*
 *Miss C. G. Howard, *Asst. in Cooking.*
 *Mrs. Ethel L. McGee, *Cooking, Dom. Econ.*
 *J. V. Smith, *Asst. in Agr.*
 *C. H. Waller, *Agr., Supt. Farm and Cannery.*
 *A. T. Wood, *Asst. in Agr.*

UTAH.

Agricultural College of Utah and the Agricultural Experiment Station, Logan.

*College faculty. †Station staff. ‡Extension staff.

- *†E. G. Peterson, Ph. D., *President. Bact. (*†)*
 *†F. S. Harris, Ph. D., *Dir. of Sta. Agron. (*†)*
 †J. T. Caine, III, M. S. A., *Dir. of Ext. Div. An. Husb. (†)*

- *†T. H. Abell, M. S., *Instr. Hort.; Asst. Hort.*
 *†Byron Alder, B. S., (*Asst.*) *Poultry Husb.; Poultryman.*

- †E. B. Brossard,¹ M. S., (*Asst.*) *Farm Mgt. Dem.*
 *G. B. Caine, A. M., (*Assoc.*) *Dairying*
 *†W. E. Carroll, Ph. D., *An. Husb.*

¹ On leave.

² Statistics 1915-16.

- *†E. G. Carter, B. S., *Instr. Bact.; Asst. Bact.*
 *Rhoda B. Cook,¹ B. S., *Dom. Art.*
 †Blanche Cooper, B. S., *Asst. State Leader Junior Voc. Ext.*
 *Jean Cox, B. S., (*Asst.*) *Foods and Dietetics.*
 †B. R. Eldredge, B. S., (*Asst.*) *Dairying.*
 †R. J. Evans, Ph. D., *Asst. Dir. Ext. Div. and State Leader of County Agts.*
 †S. P. Ewing, *Asst. Met.*
 †Goldie Faux, B. S., *Asst. State Leader Junior Voc. Ext.*
 *††H. J. Frederick, D. V. M., *Vet. Sci.; Vet.*
 *George Gardner, B. S., (*Asst.*) *Agron.*
 †H. C. Goldthorpe, B. S., *Asst. in Chem. and Bact.*
 *†J. E. Greaves, Ph. D., *Bact., Physiol. Chem.; Bact. and Chem.*
 †M. H. Greene, M. S., *Field Agt. in Marketing.*
 *†H. R. Hagan, M. S., (*Asst.*) *Zool., Ent.; Assoc. Ent.*
 *†W. W. Henderson, M. S., *Zool., Ent.; Ent.*
 *†G. R. Hill, jr., Ph. D., *Bot., Plant Path. Dir. School of Agr.*
 *†C. T. Hirst, M. S., (*Asst.*) *Chem.; Assoc. Chem.*
 †J. C. Hogenson, M. S. A., *State Leader Junior Voc. Ext.*
 *LeGrande Humpherys, B. S., (*Assoc.*) *Farm Mach.*
 *†O. W. Israelsen, M. S., (*Assoc.*) *Irrig.; Irrig. and Drainage.*
 †J. W. Jones, B. S., *Supt. Nephi Substa.*
 †J. H. Linford, D. D., *Supt. Corresp. Studies.*
 †Yeppa Lund, B. S., *Asst. in Chem. and Bact.*
 †Gertrude M. McCheyne, B. S., *State Home Dem. Leader.*
 †L. A. Merrill, B. S., *Asst. State Leader of County Agts.*
 *†M. C. Merrill, Ph. D., *Hort.*
 *Johanna Moen, (*Asst.*) *Dom. Art.*
 *†Bervard Nichols, B. S., *Instr. Bot.; Asst. Plant Path.*
 †J. W. Paxman, (*Asst.*) *Dry Farming.*
 *†William Peterson, B. S., *Geol.; Consult. Geol.*
 *†D. W. Pittman, M. S., *Instr. Agron.; Asst. Agron.*
 *C. W. Porter,¹ Ph. D., *Chem., Dir. School of Home Econ.*
 *Alice Ravenhill, F. R. S. I., *Home Econ.*
 *†B. L. Richards, B. S., (*Asst.*) *Plant Path.; Asst. Plant Path.*
 *Lavinia Richardson, B. S., *Instr. Dom. Art.*
 †L. A. Richardson, B. S., *Farm Mgt. Dem.*
 *A. H. Saxer, Ph. D., *Actg. Dir. School of Home Econ.*
 *Hattie Smith, *Libr.*
 *C. J. Sorensen, B. S., *Instr. Zool., Ent.*
 †E. W. Stephens, B. S., *Asst. State Leader Junior Voc. Ext.*
 *†George Stewart, M. S., (*Asst.*) *Agron.; Asst. Agron.*
 †J. E. Taylor, B. S., *Farm Help Specialist.*
 *J. C. Thomas, B. S., (*Asst.*) *Chem.*
 *†F. L. West, Ph. D., *Phys.; Met.*
 *R. B. West, C. E., *Agr. Engin., Dir. School of Agr. Engin.*
 †Hortense White, B. S., *Asst. in Home Econ. Ext.*
 *Alma L. Wilson, B. S., *Instr. Bot.*
 †L. M. Winsor, B. S., *Specialist in Irrig. and Drainage.*

VERMONT.

College of Agriculture and the Agricultural Experiment Station of the University of Vermont and State Agricultural College, Burlington.

*College faculty. †Station staff. ‡Extension staff.

- *G. P. Benton,¹ D. D., L. H. D., LL. D., *President.*
 *G. H. Perkins, Ph. D., L. H. D., *Acting President.*
 *†J. L. Hills, Sc. D., *Dean Coll. of Agr. Dir. of Sta. Agron. (*)*
 †Thomas Bradlee, B. S., *Dir. Ext. Service. State Leader of County Agents.*
 †G. F. Anderson, *Asst. Chem.*
 †May O. Boynton, Ph. B., *Libr.*
 *R. T. Burdick, B. S., (*Asst.*) *Agron., Farm Mech.*
 †L. H. Burgwald, B. S., *Instr. Dairying.*
 *†G. P. Burns, Ph. D., *Bot.*
 †J. E. Carrigan, B. S., *Asst. State Leader of County Agts.*
 *†F. R. Churchill, B. S., *Instr. Dairy Husb., Ext. Specialist in Dairying.*
 *††W. H. Crockett, *Editor.*
 *††M. B. Cummings, Ph. D., *Hort. Ext. Specialist in Hort.*
 †Annette C. Dimock, *Instr. Home Econ.*
 *††H. B. Ellenberger, Ph. D., (*Assoc.*) *An. and Dairy Husb.; Assoc. An. and Dairy Husb. Ext. Specialist in Dairying.*
 *F. C. Fiske, B. S., *Farm Supt.*
 *†L. H. Flint, M. S., *Instr. Bot.; Asst. Bot.*
 *W. G. Hastings, M. F., *For. (Chief For.).*
 †Bertha A. Holden, B. S., *Specialist in Home Econ.*

- *Julia L. Hurd, A. M., *Instr. Home Econ.*
 †E. L. Ingalls, A. B., *State Club Leader.*
 *†F. B. Jenks, B. S., *Agr. Ed. Ext. Specialist in Agr. Ed.*
 †C. H. Jones, M. S., *Chem.*
 *†H. A. D. Leggett, B. S., *Instr. Poultry Husb. Specialist in Poultry Husb.*
 †A. C. Lewis, B. S., *Asst. Farm Mgt. Dem.*
 *†B. F. Lutman, Ph. D., *Plant Path.*
 †H. D. Moore, A. B., *Asst. Vet.*
 †J. B. Norton, M. S., *Asst. Hort.*

- *†Alexander Parks, *Gardener.*
 *†A. K. Peltersen, Ph. D., (*Asst.*) *Bot.; Asst. Bot.*
 *H. F. Perkins, Ph. D., *Zool.*
 *Sara E. Potter, B. S., (*Actg.*) *Home Econ.*
 *†F. A. Rich, V. S., M. D., *Vet. Sci.; Vet.*
 †Jennie L. Rowell, B. S., *Asst. Chem.*
 †J. F. Sturdevant, *Sheep Specialist.*
 *Bertha M. Terrill,¹ A. M., *Home Econ.*
 †W. G. Tubbs, B. S., *Farm Mgt. Dem.*

VIRGINIA.

Virginia Agricultural and Mechanical College and Polytechnic Institute
 and the Agricultural Experiment Station, Blacksburg.

*College faculty. †Station staff. ‡Extension staff.

- *J. D. Eggleston, A. M., LL. D., *President.*
 *†H. L. Price, M. S., *Dean of Agr. Dept. Hort. (*†)*
 †A. W. Drinkard, jr., Ph. D., *Dir. of Sta.*
 †J. M. Jones, B. S., *Dir. of Ext. Work.*

- ‡Ella G. Agnew, *State Home Dem. Agt.*
 †B. G. Anderson, B. S., *Supt. Appomattox Sta.*
 †E. T. Batten, B. S., *Supt. Holland Sta.*
 †C. G. Burr, B. A., *Asst. State Agent Boys' Club Work.*
 *W. G. Chrisman, V. S., *Vet. Sci.*
 †R. P. Cocke, *Supt. Williamsburg Sta.*
 †M. O. Cooper, M. A., *An. Husb. (Coop. U. S. D. A.).*
 *†W. B. Ellett, Ph. D., *Agr. Chem.; Chem.*
 *†F. D. Fromme, Ph. D., *Plant Path., Bact.*
 †C. M. Gere, *Specialist in Cheese Making.*
 †W. W. Green, *Supervisor Tobacco Invest. and Supt. Bowling Green and Louisa Stas. (Coop. U. S. D. A.).*
 *†S. C. Harmon, B. S., *Instr. Agron.; Asst. Agron.*
 †W. G. Harris,¹ M. S., *Assoc. Chem.*
 †J. C. Hart, B. S., *Supt. Chatham Sta.*
 †H. H. Hill, M. S., *Assoc. Chem.*
 †A. N. Hodgson, M. S., *Supt. Martinsville Sta.*
 †E. R. Hodgson, M. S., *Specialist in Agron.*
 *†C. W. Holdaway, M. S., (*Assoc.*) *Dairy Husb.; Assoc. Dairy Husb.*
 *†R. E. Hunt, M. S., (*Assoc.*) *An. Husb.; Assoc. An. Husb.*

- ‡J. R. Hutcheson, M. S., *Asst. Dir. of Ext. Work.*
 *†T. B. Hutcheson, M. S., *Agron. and Supervisor County Expt. Stas.*
 *Elinor I. Jones, A. B., *Libr.*
 *D. S. Lancaster, M. S., (*Assoc.*) *An. Husb.*
 *†J. M. McBryde, Ph. D., Sc. D., *Pres. Emeritus.*
 †R. E. Marshall, M. S., *Specialist in Hort.*
 †E. R. Price, *Editor.*
 †G. S. Ralston, M. S., *Field Hort.*
 †Edith A. Roberts, *Specialist in Home Econ.*
 †T. O. Sandy, *State Agent Farmers' Dem. Work (Burkeville).*
 *†W. D. Saunders, *An. and Dairy Husb.*
 *†W. J. Schoene, M. S., *Econ. Ent.; Ent. (State Ent.)*
 †N. E. B. Talcott, B. S., *Specialist in Boys' and Girls' Poultry Clubs.*
 †J. M. Trimble, M. S., *Supt. Staunton Sta.*
 *†C. I. Wade, *Treas. (Christiansburg).*
 *C. B. Whitney, B. S., *Asst. in Chem.*
 †M. O. Wilson, *Supt. of Charlotte Sta.*
 †S. A. Wingard, M. S., *Asst. Plant Path.*
 *†T. K. Wolfe, M. S., *Assoc. Agron.*

Virginia Truck Experiment Station, Norfolk.

†Station staff.

- †T. C. Johnson, A. M., *Director. Hort.*
 †D. E. Fink, M. S. A., *Ent. Asst. (Coop. U. S. D. A.)*
 †G. R. Parrish, *Treas.*
 †D. M. Scott, *Supt. Eastern Shore Virginia Expt. Farm, Onley.*
 †L. B. Smith, B. S., *Asst. State Ent.*
 †J. C. Westcott, *Hort. Foreman.*
 †Albert White, B. S., *Asst. Hort.*

¹ On leave.

Hampton Normal and Agricultural Institute, Hampton.

*College faculty. ‡Extension staff.

*J. E. Gregg, *Principal.**‡C. K. Graham, *Dir. Agr. Dept. and Agr. Ext. Work.*

- *W. L. Aiken, *Mgr. Shellbanks Dairy.*
- *J. E. Bagley, *Asst. in Whipple Farm Dairy.*
- *Mary Bissell, *Matron Shellbanks Farm.*
- *‡J. R. Case, *Instr. Hort.*
- *Edith Church, *in charge Students' and Teachers' Kitchen.*
- *J. W. Coughlin, *Teacher Chem.*
- *F. L. Crouse, *Instr. Farm Crops.*
- *B. L. Davis, *in charge Horse Barn.*
- ‡G. J. Davis, *Rural Community Work.*
- *Sabrina Dunnington, *Teacher Dom. Sci.*
- *‡G. C. Faville, *Vet.*
- *Ina H. Fenwick, *Teacher Dom. Arts.*
- *‡F. S. Gammack, *Instr. Poultry Husb.*
- *A. G. Gilbert, *Mgr. Shellbanks Farm.*
- *Ada Gilmore, *in charge Laundry.*
- *Annie M. Goodrich, *Teacher Ele. Agr.*
- *Daisy L. Guilette, *Instr. Laundry Work.*
- *Lenora E. Herron, *Libr.*
- *Mary R. Kennedy, *Teacher Home Econ.*

- *Peter Kinghorn, *Florist, Landsc. Gardener.*
- *C. A. Lancaster, *Poultryman, Shellbanks Farm.*
- *Bertina A. Leete, *Dir. Dom. Sci. Dept.*
- *C. N. McIntosh, *Asst. Landsc. Gard.*
- *R. T. Muller, *Hort.*
- *R. T. Neal,¹ *Asst. to Dir. Agr. Dept.*
- *Caroline D. Pratt, *Dir. Dom. Arts.*
- *W. M. Pope, *Asst. in Floral Dept.*
- *P. F. Skofield, *Instr. Dairying.*
- *Clara M. Snow, *in charge Shellbanks Farm School.*
- *Mary L. Stephens, *Instr. Laundry Work.*
- *Maude V. Stickle, *Teacher Dom. Sci.*
- *E. Jeanette Taylor, *Teacher Sewing.*
- *J. W. B. Tull, *Asst. in Hort.*
- *Daisy E. Walker, *Teacher Dressmaking.*
- *Sarah White, *in charge Indus. Sewing Room.*

WASHINGTON.**State College of Washington and the Agricultural Experiment Station, Pullman.**

*College faculty. †Station staff. ‡Extension staff.

*E. O. Holland, Ph. D., *President.**‡‡George Severance, B. S., *Acting Dir. of Sta. Vice Dean Coll. of Agr. Agr. (*†‡)*‡W. S. Thornber, M. S., *Dir. of Ext. Dept.*

- *Hannah C. Aase, Ph. D., *Instr. Bot.*
- *E. D. Alvord, B. S., *Instr. Farm Crops.*
- †O. E. Barbee, B. S., *Asst. in Farm Crops.*
- ‡E. H. Barber, jr., *Specialist in Dairying.*
- *‡‡R. J. Barnett, M. S., *Pomol.; Asst. Hort.*
- †‡H. L. Blanchard, *Dairy and Poultry Invest. and Asst. Supt. Western Wash. Sta., Puyallup.*
- †R. P. Bledsoe, M. S., *in charge Water-ville Branch Sta.*
- *C. M. Brewster, A. M., (Assoc.) *Inorg. and Phys. Chem.*
- †R. B. Coglon, B. S., *State Leader of County Agts.*
- *H. L. Cole, B. S., *Instr. Chem.*
- *†H. N. Colman, B. S., *Instr. Dairying; Supt. Advanced Registry Testing.*
- *R. P. Cope, B. S., (Asst.) *Anal. and Agr. Chem.*
- *‡Agnes H. Craig, B. S., *Head College of Home Econ.*
- *‡B. F. Dana, M. S., *Instr. Bact.; Asst. Bact.*
- *A. D. Decker, M. F., (Asst.) *For.*
- †Barbara Drum, M. S., *Libr.*
- *J. P. Fairbank, B. S., *Instr. Agr. Engin.*
- †Arthur Frank, B. S., *Lab. Asst., Western Wash. Sta., Puyallup.*
- *‡‡E. F. Gaines, M. S., *Instr. Agron.; Cerealist.*
- †O. E. Gibson, B. S., *Field Agt. in Dairying.*
- *J. H. Gooding, F. R. H. S., *Florist.*
- *†F. D. Heald, Ph. D., *Plant Path.*
- *A. F. Heck, M. S., *Instr. Soils.*
- ‡Leonard Hegnauer, B. S., *Specialist in Soils and Crops.*
- †H. F. Holtz, M. S., *Asst. Soil Physicist.*
- *‡C. E. Howell, B. S., *Instr. An. Husb.*
- *D. R. Hull, M. L. A., (Asst.) *Landsc. Gard., Flor.*
- †C. H. Hunt, M. A., *Asst. Chem.*
- *‡Lella W. Hunt, B. S., (Asst.) *Home Econ.*
- *G. H. Jensen, Ph. D., (Assoc.) *Bot.*
- *W. T. Johnson, B. S., D. V. M., *Instr. Vet. Surg.*
- ‡Elizabeth Jones, *Asst. State Leader in Boys' and Girls' Club Work.*
- *‡‡J. W. Kalkus, D. V. S., *Path., Histol.; Vet.*
- †D. M. Langohr, B. S., *Field Asst. in Cereal Invest.*

¹ On leave.

- ††W. A. Linklater, B. S. A., *Supt. Western Wash. Sta., Puyallup.*
 †M. A. McCall, M. S., *Dry Land Specialist and Supt. Adams Branch Sta., Lind.*
 *M. O. Maughan, M. A., *Instr. Dairy Prod.*
 *†A. L. Melander, Sc. D., *Head Zool. Dept.; Ent.*
 *Otto Menig, D. V. S., *Vet. Med.*
 †R. N. Miller, M. S., *Farm Mgt. Dem.*
 *†O. M. Morris, M. S., *Head Hort. Dept.; Hort.*
 *†T. J. Murray, M. S., (*Assoc.*) *Bact.; Bact.*
 *‡S. B. Nelson, D. V. M., *Dean College of Vet. Sci.*
 †G. A. Olson, M. S., *Chem. (State Chem.).*
 *Alice G. Paterson, A. B., (*Asst.*) *Anal. Chem.*
 †O. V. Patton, *Asst. State Leader of County Agts.*
 *F. L. Pickett, Ph. D., *Head Dept. Bot.*
 *I. H. Pierce, Ph. C., (*Asst.*) *Gen. Chem.*
 *†E. G. Schafer, M. S., *Farm Crops; Agron.*
 *Doris Schumaker, B. S., *Instr. Home Econ.*
 *†W. T. Shaw, M. S., *Zool.*
 †G. R. Shoup, *Poultryman, Western Wash. Sta., Puyallup.*

- ††Mrs. G. R. Shoup, *Poultry Specialist, Western Wash. Sta., Puyallup.*
 *†F. J. Sievers, B. S., *Soil Phys.*
 †B. S. Smead, B. S., *State Leader of Boys' and Girls' Pig Clubs.*
 †Anthony Spuler, B. S., *Asst. Ent.*
 ††J. L. Stahl, A. B., *Hort., Western Wash. Sta., Puyallup.*
 *J. H. Stephen, B. S., *Instr. Bot., Hort.*
 ††E. B. Stookey, B. S., *Agron., Western Wash. Sta., Puyallup.*
 *J. J. Stratton, D. V. S., *Meat Insp. (Spokane).*
 †Mary E. Sutherland, B. S., *State Leader of Home Econ.*
 *Sadie J. Swenson, *Instr. Textiles.*
 *C. C. Todd, Ph. D., *Head Chem. Dept.*
 *F. G. Tucker, A. B., *Instr. Phys.*
 *G. D. Turnbow, M. S., *Instr. Dairy Mfrs.*
 †Edna Walker, B. S., *Asst. State Leader of Home Econ.*
 *†O. L. Waller, Ph. M., *Vice Pres.; Irrig. Engin.*
 *E. E. Wegner, D. V. S., B. S., *Vet. Anat., Surg.*
 *‡Helen D. Whitaker, B. S., *Poultry Husb. Specialist in Poultry Husb.*
 *W. K. Whitaker, *Instr. Poultry Husb.*
 *†E. G. Woodward, A. M., *Dairy Husb.*
 †H. M. Woolman, *Asst. Plant Path.*

WEST VIRGINIA.

College of Agriculture and the Agricultural Experiment Station of West Virginia University, Morgantown.

*College faculty. †Station staff. ‡Extension staff.

- *F. B. Trotter, A. M., LL. D., *President of University.*
 *†J. L. Coulter, Ph. D., *Dean Coll. of Agr. Dir. of Sta.*
 †C. R. Titlow, *Dir. Agr. Ext. Dept.*

- *†W. H. Alderman, B. S. A., *Hort.*
 *†E. L. Andrews, B. S., (*Assoc.*) *Poultry Husb.; Asst. Poultry Husb.*
 *†L. D. Arnett, Ph. D., *Libr.*
 *T. C. Atkeson, Ph. D., *An. Husb. Emeritus.*
 †Horace Atwood, M. S. A., *Poultryman.*
 *†E. C. Auchter,¹ B. S., (*Asst.*) *Hort.; Asst. Hort.*
 †Anthony Berg, B. S., *Asst. Plant Path.*
 †H. W. Cave, M. S., *Specialist in Dairy Husb. (Coop. U. S. D. A.).*
 ‡S. A. Cody, *Specialist in Poultry Husb.*
 *H. R. Cokeley, B. S., *Instr. An. Husb.*
 *Rachel H. Colwell, A. M., (*Assoc.*) *Home Econ.*
 †I. S. Cook, jr., B. S. A., *Consult. Agron. (Wheeling).*
 *†H. L. Crane, B. S., *Instr. Hort.; Asst. Hort.*
 *†A. L. Dacy, B. S., (*Assoc.*) *Hort.; Assoc. Hort.*
 *†A. J. Dadisman, M. S. A., (*Assoc.*) *Rural Econ. and Farm Mgt.; Farm Mgt. Invest.*

- *†Henry Dorsey, M. S., (*Asst.*) *Agron.; Asst. Agron.*
 †R. B. Dustman, B. S., *Specialist in Agron.*
 †N. T. Frame, B. A., *State Agt. Farmers' Dem. Work.*
 †N. J. Giddings, M. S., *Plant Path.*
 ‡Sadie R. Guseman, B. S., *Girls' Canning Clubs.*
 †C. H. Hartley, B. S., *Asst. Dir. of Agr. Ext. Dept.*
 †Marion M. Hepworth, B. S., (*Assoc.*) *Home Econ. Ext.*
 †B. H. Hite, M. S., *Chem.*
 †W. H. Kendrick, B. S., *in charge Boys' Club Work.*
 †L. I. Knight, Ph. D., *Plant Physiol.*
 †J. H. B. Krak, B. S., *Asst. Chem.*
 †F. B. Kunst, A. B., *Asst. Chem.*
 †W. R. Legge, M. S., *Specialist in Hort.*
 *†C. A. Lueder, D. V. M., *Vet. Sci.; Vet.*
 *†T. C. McIlvaine, M. S., *Instr. Agron.; Asst. Agron.*
 *Callie C. Nuzum, B. S., *Instr. Home Econ.*

¹ On leave.

- *Mary B. Oliver, B. S., *Instr. Home Econ.*
 *†R. H. Patch,¹ M. S., *Instr. Hort.; Asst. Flor.*
 *†L. M. Peairs, M. S., *Ent.; Research Ent.*
 *†W. A. Rhea, jr., M. S., (*Asst.*) *Dairy Husb.; Head Dairy Dept.*
 *†H. W. Richey, B. S., (*Asst.*) *Hort.; Asst. Hort.*
 †W. E. Rumsey, B. S. A., *Ent. (State Ent.)*.
 *†R. M. Salter, M. S., (*Asst.*) *Soils; Asst. Soils Chem.*
 †C. F. Sarle, B. S., *Asst. in Farm Mgt. (Coop. U. S. D. A.)*.
 †C. H. Scherffius, *Tobacco Invest. (Coop. U. S. D. A.)*.

- *†E. W. Sheets, M. S. A., *An. Husb.*
 *†F. W. Stemple, M. S., *Agron.*
 *††C. E. Stockdale, B. S., *Agr. Editor.*
 †L. F. Sutton, B. S. A., *Supt. and Asst. Hort., Reymann Memorial Farms, Wardensville.*
 †E. A. Tuckwiller, B. S., *Specialist in An. Husb.*
 †R. H. Tuckwiller, *Asst. An. Husb. (Coop. U. S. D. A. Lewisburg.)*
 †C. E. Weakley, jr., *Asst. Chem.*
 *†C. F. Wells, B. A., *Instr. Soils; Asst. Soils Chem.*
 *††D. M. Willis, *Financial Sec.*
 *††C. H. Winkler, Ph. D., *Rural Ed.*
 *†J. J. Yoke, B. S., (*Asst.*) *An. Husb.; Asst. An. Husb.*

The West Virginia Collegiate Institute, Institute.

*College faculty.

*Byrd Prillerman, A. M., *President. Biol. and Agr.*

*A. W. Curtis, M. Agr., *Dir. Agr. Dept.*

*Charlotte R. Campbell, *Dom. Sci.*

*Mary Eubank, *Supt. Home Econ.*

*D. L. Ferguson, M. S., *Biol.*

*Adah Hyde, A. B., *Sewing.*

*Estella Lee, B. S., *Asst. in Dom. Sci.*

*G. E. Smith, B. S. A., *Chem.*

*Mrs. Amanda D. Spriggs, *Dressmaking.*

WISCONSIN.

College of Agriculture and the Agricultural Experiment Station of the University of Wisconsin, Madison.

*College faculty. †Station staff. ‡Extension staff.

*C. R. Van Hise, Ph. D., LL. D., *President of University.*

*††H. L. Russell, Ph. D., *Dean Coll. of Agr. Dir. of Sta. Dir. of Agr. Ext. Service.*

*††A. S. Alexander, M. D. C., D. V. M., *Vet. Sci.; Vet.*

‡Elisabeth L. Amery, B. S., *Asst. in Girls' Club Work.*

*†F. A. Aust, M. S., (*Asst.*) *Landsc. Design.*

‡G. E. Babbage, *Asst. in Agron. (Ashland).*

*†S. M. Babcock, Ph. D., LL. D., D. Sc., *Agr. Chem. Emeritus.*

*†Freda M. Bachmann, Ph. D., *Instr. Agr. Bact.; Asst. Agr. Bact.*

*††B. A. Beach, D. V. M., (*Asst.*) *Vet. Sci.; Vet.*

*††G. H. Benkenorf, B. S., (*Asst.*) *Dairy Husb.; Dairy Husb.*

‡T. L. Bewick, M. S., *in charge Boys' and Girls' Club Work.*

*Cora E. Binzel, (*Asst.*) *Home Econ.*

*J. D. Black, M. A., *Instr. Agr. Econ.*

‡Agnes Boeing, B. S., *Instr. Home Econ.*

*†G. Bohstedt, M. S., *Instr. An. Husb.; Asst. An. Husb.*

*†P. W. Boutwell, Ph. D., *Instr. Agr. Chem.; Asst. Agr. Chem.*

*Mary Buell, M. S., *Instr. Home Econ.*

‡D. S. Bullock, M. A., (*Asst.*) *An. Husb.*

†M. H. Campbell, B. S., *Asst. in Expt. Brdg.*

†C. B. Clevenger, B. S., *Asst. in Soils and Agr. Bact.*

*†Florence Coerper, M. S., *Asst. Plant Path.*

*†L. J. Cole, Ph. D., *Expt. Brdg.*

*May L. Cowles, B. S., *Instr. Home Econ.*

*Josephine M. Cullinan, B. S., *Asst. in Home Econ.*

*†A. C. Dahlberg, M. S., *Instr. Dairy Husb.; Asst. Dairy Husb.*

*Amy L. Daniels, Ph. D., *Home Econ.*

*††E. J. Delwiche, M. S., (*Assoc.*) *Agron. In charge Ashland and Spooner Branch Stas., Douglas and Rusk County Dem. Stas. (Green Bay.)*

*†Helen J. Dodge, B. S., *Instr. Home Econ.*

*††E. H. Farrington, M. S., *Dairy Husb.*

*†C. L. Fluke, jr., M. S., *Instr. Econ. Ent.; Research Asst. in Ent.*

¹ On leave.

- †G. W. Forster, M. S., *Asst. in Agr. Econ.*
- *†E. B. Fred, Ph. D., (*Assoc.*) *Agr. Bact.; Agr. Bact.*
- *†W. D. Frost, Ph. D., D. Pub. H., *Agr. Bact.*
- *†J. G. Fuller, B. S., (*Assoc.*) *An. Husb.; An. Husb.*
- *†C. J. Galpin, M. A., (*Asst.*) *Agr. Econ.; Country Life Work.*
- *†W. J. Geib, M. Agr., (*Asst.*) *Soils; Soil Survey Work (Coop. U. S. D. A.).*
- *†L. G. Gentner, B. S., *Instr. Econ. Ent.; Asst. Econ. Ent.*
- *†L. F. Graber, M. S., (*Asst.*) *Agron.; Agron.*
- *†E. J. Graul, B. S., *Instr. Soils; Asst. in Soils.*
- †E. G. Gross, B. S., *Asst. in Agr. Chem.*
- *†R. V. Gunn, B. S., *Instr. Agr. Econ. and Farm Practice; Asst. Agr. Econ.*
- *†F. B. Hadley, D. V. M., (*Assoc.*) *Vet. Sci.; Vet.*
- *†J. G. Halpin, B. S., *Poultry Husb.*
- †L. P. Hanson, B. S., *Analyst, State Soils Lab.*
- †R. T. Harris, *Supervisor in charge of Dairy Tests.*
- *†E. B. Hart, B. S., *Agr. Chem.*
- *†E. G. Hastings, M. S., *Agr. Bact.*
- *†K. L. Hatch, B. S., *Agr. Ed. Asst. Dir. Agr. Ext. Service.*
- *†J. B. Hayes, B. S., *Instr. Poultry Husb.; Asst. Poultry Husb.*
- *†C. S. Hean, B. A., *Libr.*
- *†W. A. Henry, D. Agr., D. Sc., *Agr. Emeritus.*
- *†B. H. Hibbard, Ph. D., *Agr. Econ. (Coop. and Marketing).*
- *Ellen Hillstrom, B. S., (*Asst.*) *Home Econ.*
- †Emma F. Hoag, M. A., *Asst. in Agr. Econ.*
- *†E. D. Holden, B. S., *Instr. Agron.; Asst. Agron.*
- *†A. W. Hopkins, B. A., B. L., *Agr. Journalism, Editor.*
- *†G. C. Humphrey, B. S., *An. Husb.*
- *Ada E. Hunt, B. A., *Instr. Home Econ.*
- *J. A. James, B. S., (*Assoc.*) *Agr. Ed.*
- *†A. G. Johnson, Ph. D., (*Asst.*) *Plant Path.; Plant Path.*
- *†James Johnson, M. S., (*Asst.*) *Hort.; Hort.*
- *†O. N. Johnson, *Asst. Poultry Husb.*
- *†E. R. Jones, M. S., (*Assoc.*) *Soils; Soils.*
- *†L. R. Jones, Ph. D., D. Sc., *Plant Path.*
- †Myrtle E. Jones, B. A., *Asst. in Agr. Econ.*
- †Sara Jones, M. S., *Asst. in Expt. Brdg.*
- *†O. A. Juve, *Instr. Agr. Econ.; Asst. Agr. Econ.*
- *†G. W. Keitt,¹ Ph. D., (*Assoc.*) *Plant Path.; Plant Path.*
- †Hazel Kent, B. S., *Asst. in Agr. Chem.*
- *††Frank Kleinheinz, (*Asst.*) *An. Husb.; An. Husb.*
- *Jean Krueger, M. S., (*Asst.*) *Home Econ.*
- *†B. D. Leith, B. S., (*Asst.*) *Agron.; Agron.*
- *†Henry Lunz, B. S., *Instr. Agron.; Asst. Agron.*
- †E. L. Luther, B. S., *Supt. of Farmers' Insts., State Supervisor of Co. Representatives.*
- *†E. R. McIntyre, *Asst. in Agr. Journalism, Editorial Asst.*
- *Hazel Manning, B. S., *Instr. Home Econ.*
- *†W. E. Markey, *Asst. An. Husb.*
- *†Abby L. Marlatt, M. S., *Home Econ.*
- *†D. F. Mattson, B. S., *Instr. Dairy Husb.; Asst. Dairy Husb.*
- †Maude Miller, M. S., *Asst. in Plant Path.*
- *†J. G. Milward, M. S., (*Assoc.*) *Hort.; Hort.*
- *†J. G. Moore, M. S., M. H., *Hort.*
- *†R. A. Moore, *Agron.*
- *†F. B. Morrison, B. S., (*Assoc.*) *An. Husb.; An. Husb., Asst. Dir. of Sta.*
- *†G. B. Mortimer, B. S., *Instr. Agron.; Asst. Agron.*
- †R. F. Murray, B. S., *Asst. Field Supervisor Ext. Courses and Schools.*
- *†F. L. Musbach, B. S., (*Asst.*) *Soils. In charge Marshfield Branch Sta.*
- *†A. C. Oosterhuis, M. S., (*Asst.*) *An. Husb.; An. Husb.*
- *†D. H. Otis, M. S., *Asst. Dcan. Farm Mgt.*
- *†W. H. Peterson, Ph. D., (*Asst.*) *Agr. Chem.; Agr. Chem.*
- *W. Pitz, M. S., *Instr. Agr. Chem.*
- *†G. F. Potter, M. S., *Instr. Hort.; Asst. Hort.*
- *Dorothy Roberts, B. S., *Instr. Home Econ.*
- †R. H. Roberts, M. S., *Instr. Hort.*
- *†H. E. Roethe, B. S., *Asst. in Agr. Engin.*
- *†A. J. Roush, B. Arch., (*Asst.*) *Agr. Engin.*
- *†J. L. Sammis, Ph. D., (*Assoc.*) *Dairy Husb.; Dairy Husb.*
- *†E. C. Sauvé, B. S., *Instr. Agr. Engin.; Asst. Agr. Engin.*
- *L. M. Schindler, M. S., *Instr. Agr. Engin.; Asst. Agr. Engin.*
- *Celestine L. Schmit, (*Assoc.*) *Home Econ.*
- †D. W. Smith, B. S., *Asst. in Agr. Chem.*
- *†H. H. Sommer, B. S., *Asst. in Agr. Chem.*
- *†Harry Steenbock, Ph. D., (*Assoc.*) *Agr. Chem.; Agr. Chem.*
- *H. W. Stewart, B. S., (*Asst.*) *Soils.*
- *†A. L. Stone, (*Asst.*) *Agron.; Agron.*
- *Louise Strang, B. S., *Instr. Home Econ.*
- *†W. A. Sumner, B. S., *Instr. Agr. Journalism; Asst. Editor.*

¹ On leave.

- *†H. C. Taylor, Ph. D., *Agr. Econ.*
 *†‡J. L. Tormey, B. S., (*Assoc.*) *An. Husb.; An. Husb.*
 *†W. E. Tottingham, Ph. D., (*Assoc.*) *Agr. Chem.; Agr. Chem.*
 *†Emil Truog, M. S., (*Assoc.*) *Soils; Soils.*
 *†‡H. W. Ullsperger, B. S., (*Asst.*) *Soils; in charge Marinette Co.' Dem. Sta., (Sturgeon Bay).*
 *†‡R. E. Vaughan, M. S., (*Asst.*) *Plant Path.; Plant Path.*
 *†H. L. Walster,¹ M. A., (*Asst.*) *Soils; Soils.*
 *†‡W. W. Weir, M. S., (*Asst.*) *Soils; Soils.*
- *Edith Wengel, B. S., *Asst. in Home Econ.*
 *†‡F. M. White, M. S., (*Asst.*) *Agr. Engin.; Agr. Engin. (in charge).*
 *†‡A. R. Whitson, B. S., *Soils.*
 *†‡H. F. Wilson, M. S., *Econ. Ent.*
 ‡J. F. Wojta, M. S., *Field Supervisor Agr. Ext. Courses and Schools, Asst. State Leader County Agts.*
 *†C. M. Woodworth, M. S., *Asst. in Expt. Brdg.*
 *†‡A. H. Wright, M. S., *Instr. Agron.; Asst. Agron.*
 *†‡W. H. Wright, M. S., (*Asst.*) *Agr. Bact.; Agr. Bact.*

WYOMING.

College of Agriculture and the Agricultural Experiment Station of the University of Wyoming, Laramie.

*College faculty. †Station staff. ‡Extension staff.

- *†Aven Nelson, Ph. D., *Acting President.NBot. (*†) Hort. (†)*
 *†A. D. Faville, M. S., *Dean Coll. Agr. Dir. of Sta. An. Husb. (*†)*
 ‡A. E. Bowman, B. S., *Dir. of Agr. Ext.*
- †O. A. Beath, M. A., *Research Chem.*
 *A. E. Bellis, M. S., *Phys.*
 ‡R. S. Besse, M. A., *State Leader of County Agts.*
 †F. S. Burrage, B. A., *Sec.*
 ‡E. F. Burton, B. S., *Dairy Dem. (Coop. U. S. D. A.).*
 †P. H. Dupertuis, B. S., *Asst. in Boys' and Girls' Club Work.*
 *Lulu A. Condron, B. S., *Instr. Home Econ.*
 *H. L. Eby, A. B., *Rural Ed.*
 *†J. C. Fitterer, C. E., *Irrig. Engin.*
 *J. F. Groves, Ph. D., (*Asst.*) *Biol.*
 †J. I. Hardy, Ph. D., *Asst. Wool Specialist.*
 *Grace R. Hebard, Ph. D., *Libr.*
 †F. E. Hepner, Ph. G., M. S., *Research Chem.*
 †Marion V. Higgins, *Libr.*
 *†J. A. Hill,¹ B. S., *Textile Indus., Wool Specialist.*
 †I. L. Hobson, B. S., *State Leader Boys' and Girls' Clubs.*
- ‡Mary Hoover, B. S., *Asst. Boys' and Girls' Clubs.*
 *Emma H. Knight, A. B., (*Asst.*) *Home Econ.*
 ‡Henrietta Kolshorn, B. S., *State Leader Home Dem. Work.*
 *†E. H. Lehnert, D. V. M., *Vet. Sci., Bact.; Vet.*
 *S. K. Loy, Ph. D., *Chem.*
 ‡J. D. McVean, B. S., *An. Husb. Ext.*
 *H. M. Martin,¹ V. M. D., *Asst. in An. Diseases.*
 *†E. C. O'Roke, A. M., *Instr. Zool.; Asst. Parasitol.*
 *†T. S. Parsons,¹ M. S., *Agron.*
 *†J. L. Robinson,¹ M. S., *Asst. Agron.*
 *†J. W. Scott, Ph. D., *Zool.; Research Parasitol.*
 *†K. T. Steik, A. M., (*Assoc.*) *Chem.; Engin. Chem.*
 *†A. F. Vass, Ph. D., *Assoc. Agron.*
 *Katharine A. Waller, *Instr. Home Econ.*
 *Emeline S. Whitcomb, B. S., *Home Econ.*

¹ On leave.

INDEX OF NAMES.

PART 2.

- Aase, H. C., 62.
 Abbey, M. J., 37.
 Abbott, C., 6.
 Abell, M. F., 11.
 Abell, T. H., 59.
 Ackert, J. E., 22.
 Adair, D. W., 8.
 Adams, B., 42.
 Adams, F., 8.
 Adams, G. E., 54.
 Adams, J. F., 52.
 Adams, J. W., 10.
 Adams, M., 39.
 Adams, M. G., 48.
 Adams, R., 39.
 Adams, R. L., 8.
 Agee, A., 3, 40, 41.
 Agee, H. P., 15.
 Agnew, E. G., 61.
 Agnew, M. A., 5.
 Ahearn, M. F., 22.
 Ahern, I., 51.
 Ahrens, I. V., 38.
 Aicher, L. C., 15.
 Aiken, W. L., 62.
 Ainsworth, E. C., 19.
 Aitcheson, W. J., 28.
 Aitkenhead, W., 18.
 Albrecht, W. A., 35.
 Albro, F. W., 8.
 Alcock, J. R., 29.
 Alder, B., 59.
 Alderman, W. H., 63.
 Aldrich, J. M., 18.
 Alexander, A. S., 64.
 Alexander, L. L., 35.
 Alexander, W. H., 49.
 Alexander, W. P., 15.
 Aley, R. J., 27.
 Alford, S. W., 38.
 Allard, H. W., 22.
 Allee, W. G., 22.
 Allen, A. A., 42.
 Allen, B. F., 37.
 Allen, B. W. P., 57.
 Allen, C. L., 42.
 Allen, E. R., 49.
 Allen, E. W., 3.
 Allen, F. L., 48.
 Allen, H. E., 18.
 Allen, H. L., 29.
 Allen, L. J., 51.
 Allen, P. W., 16.
 Allen, R. M. (Hawaii), 15.
 Allen, R. M. (Ky.), 25.
 Allen, R. S., 28.
 Allen, R. W., 14.
 Allen, W. A., 29.
 Allen, W. H., 13.
 Allison, H. O., 35.
 Allison, I. M. K., 10.
 Allison, J. H., 32.
 Allison, J. K., 16.
 Allison, L. E., 18.
 Allison, W. A., 16.
 Allred, C. E., 57.
 Alvord, E. D., 62.
 Alway, F. J., 32.
 Amery, E. L., 64.
 Ames, C. T., 34.
 Ames, J. W., 49.
 Amos, H. H., 22.
 Ancona, E. M., 52.
 Anderson, A., 38.
 Anderson, A. C., 30.
 Anderson, A. E., 48.
 Anderson, B. G., 61.
 Anderson, C. R., 52.
 Anderson, E. G., 42.
 Anderson, E. N., 38.
 Anderson, G. F., 60.
 Anderson, H. W., 16.
 Anderson, J. A., 32.
 Anderson, L., 54.
 Anderson, M. B., 26.
 Anderson, O. G., 18.
 Anderson, P. A., 32.
 Anderson, P. J., 29.
 Anderson, R. J., 45.
 Anderson, S. L., 18.
 Anderson, V. G., 40.
 Anderson, V. J., 16.
 Anderson, W. E., 38.
 Anderson, W. S., 25.
 Andree, R. A., 58.
 Andrews, E. L., 63.
 Andrews, H. A., 30.
 Andrews, J. B., 16.
 Ansporn, B. W., 28.
 Anthony, E. L., 52.
 Anthony, R. D., 45.
 App, F., 40, 41.
 Appleman, C. O., 28.
 Arentson, J., 57.
 Arey, J. A., 45.
 Armsby, H. P., 3, 52, 53.
 Armstrong, G. M., 55.
 Arndt, C. H., 58.
 Arnett, C. N., 37.
 Arnett, L. D., 63.
 Arnold, G. F., 34.
 Army, A. C., 32.
 Arny, L. W., 29.
 Arthur, J. C., 18.
 Ashby, R. C., 32.
 Atherton, M., 59.
 Atkeson, T. C., 63.
 Atkins, E. W., 19.
 Atkins, R. C., 6.
 Atkinson, A., 37.
 Atkinson, T. W., 26.
 Atwood, H., 63.
 Atwood, W. M., 51.
 Aubry, V. G., 40.
 Auchter, E. C., 63.
 Augustus, E. K., 16.
 Aull, W. B., 55.
 Aust, F. A., 64.
 Austin, R. H., 7.
 Averill, A. W., 27.
 Averill, G. C., 22.
 Averitt, S. D., 25.
 Avery, S., 3, 38.
 Ayers, W. E., 42.
 Ayres, B., 3, 57.
 Ayres, W. E., 7.
 Babb, J. G., 35.
 Babbage, G. E., 64.
 Babcock, D. C., 49.
 Babcock, E. B., 8.
 Babcock, H. E., 42.
 Babcock, S. M., 64.
 Bachmann, F. M., 64.
 Bachtell, M. A., 48.
 Backus, L. S., 35.
 Bacon, P. E., 25.
 Baer, A. A., 38.
 Baer, A. C., 50.
 Baer, W. W., 45.
 Bagley, J. E., 62.
 Bagué, J., 54.
 Bahnsen, P. F., 5.
 Bailey, C. H., 32.
 Bailey, D. E., 19.
 Bailey, E. M., 11.
 Bailey, E. W., 16.
 Bailey, L. P., 48.
 Bain, S. M., 57.

- Baird, H. S., 8.
 Baird, M. M., 22.
 Baker, C. A., 10.
 Baker, C. M., 48.
 Baker, F. R., 45.
 Baker, G. J., 32.
 Baker, H., 19.
 Baker, H. E., 57.
 Baker, H. J., 11.
 Baker, J. C., 45.
 Baker, M. B., 32.
 Baker, W. H., 35.
 Bakke, A. L., 19.
 Baldwin, F. M., 19.
 Baldwin, R. J., 30.
 Balis, W. H., 26.
 Ball, O. M., 58.
 Ball, S. C., 29.
 Ballard, A. J., 40.
 Ballard, W. R., 28.
 Ballinger, F., 37.
 Ballou, F. H., 49.
 Balmer, F. E., 32.
 Bancroft, R. L., 19.
 Banks, R. S., 19.
 Barbee, O. E., 62.
 Barber, E. H., jr., 62.
 Bardwell, E. M., 19.
 Barham, J. F., 35.
 Barker, E. E., 42.
 Barker, H. S., 25.
 Barker, J. F., 48.
 Barker, P. B., 32.
 Barker, R. R., 49.
 Barlow, J., 54.
 Barnehey, O. L., 40.
 Barnes, B. W., 46.
 Barnes, E. E., 48.
 Barnett, E., 34.
 Barnett, N. M., 19.
 Barnett, R. J., 62.
 Barnett, V. M., 6.
 Barnett, W. A., 55.
 Barnum, C. F., 30.
 Barovetto, G., 8.
 Barre, H. W., 55.
 Barrett, J. T., 8.
 Barron, J. H., 42.
 Barrows, H. P., 51.
 Barrows, W. B., 30.
 Barrows, W. M., 48.
 Barrus, M. F., 42.
 Barss, A. F., 51.
 Barss, H. P., 51.
 Bartholomew, C. E., 57.
 Bartholomew, R. P., 22.
 Bartlett, J. M., 27.
 Bartlett, J. W., 40.
 Barto, D. O., 16.
 Bassett, L. B., 32.
 Batchelor, L. D., 8.
 Bates, S. L., 26.
 Bates, W. E., 8.
 Batten, E. T., 61.
 Battiste, M. J., 56.
 Bauer, F. C., 16.
 Bausman, P. R., 18.
 Beach, B. A., 64.
 Beach, C. L., 11.
 Beach, D., 27.
 Beach, F. H., 48.
 Beach, J. R., 8.
 Beach, S. A., 19.
 Beal, A. C., 42.
 Beal, J. M., 34.
 Beal, W. H., 3.
 Beal, W. J., 30.
 Beale, A. M., 26.
 Beall, C. M., 18.
 Beall, F. C., 18.
 Beals, C. L., 29.
 Beam, A. L., 52.
 Bean, R. J., 40.
 Bear, F. E., 48, 49.
 Beard, R. F., 47.
 Beath, O. A., 66.
 Beaumont, A. B., 29.
 Beavers, J. C., 18.
 Bechdel, S. I., 52.
 Bechtel, A. R., 42.
 Bechtel, J. R., 52.
 Beckenstrater, H., 28.
 Becker, G. G., 7.
 Beckett, S. H., 8.
 Beckman, F. W., 19.
 Beckwith, C. S., 41.
 Beckwith, T. D., 51.
 Beechey, L. P., 48.
 Beeler, M. N., 35.
 Beers, W. L., 37.
 Beeson, M. A., 50.
 Behrens, C. A., 18.
 Bell, A. T., 26.
 Bell, F. W., 58.
 Bell, J. D., 10.
 Bell, M. M., 35.
 Bellis, A. E., 66.
 Belton, H. L., 8.
 Bemis, B. E., 54.
 Bemis, H. E., 19.
 Benbrook, E. A., 50.
 Bengtson, N. A., 38.
 Benjamin, E. W., 42.
 Benkenndorf, G. H., 64.
 Benner, J. W., 30.
 Bennett, E. R., 15.
 Benson, H. B., 6.
 Benson, J. P., 42.
 Benson, N. B., 57.
 Bentley, F. L., 52.
 Bentley, G. M., 57.
 Bentley, J., jr., 42.
 Bentley, M. C., 19.
 Bentley, W. D., 50.
 Benton, A. H., 32.
 Benton, G. P., 60.
 Benton, H., 58.
 Beresford, R., 19.
 Berg, A., 63.
 Berg, C. A., 58.
 Berger, E. F., 30.
 Bergh, O. I., 32.
 Bergman, H. D., 20.
 Bergquist, S. G., 30.
 Berly, J. A., 55.
 Berridge, A. M., 30.
 Berry, J. B., 13.
 Berry, J. T., 32.
 Berry, R. W., 20.
 Besemer, A. M., 42.
 Besse, R. S., 66.
 Bessey, E. A., 30.
 Bethell, B. O., 58.
 Betten, C., 42.
 Betz, M., 48.
 Beyer, I., 3, 16.
 Bewick, T. L., 64.
 Bias, J. H., 6.
 Bibbins, A. L., 30.
 Biekart, H. M., 41.
 Bier, R., 42.
 Biester, A. M., 32.
 Bigelow, Z. E., 30.
 Bigford, G. L., 13.
 Biles, J., 38.
 Billings, W. A., 32.
 Bilsborrow, J. D., 16.
 Bilsing, S. W., 58.
 Bing, P. C., 32.
 Binnewies, E., 56.
 Binzel, C. E., 64.
 Bioletti, F. T., 8.
 Bircher, L. J., 20.
 Bird, B. O., 6.
 Birdsall, B. W., 22.
 Bisby, G. R., 32.
 Bishop, A., 7.
 Bishop, E. C., 20.
 Bislig, J. F., 20.
 Bissell, M., 62.
 Bitler, R. O., 18.
 Bittenbender, H. A., 20.
 Bizzell, J. A., 42.
 Bizzell, W. B., 58.
 Black, H. V., 13.
 Black, J. D., 64.
 Black, L. W., 13.
 Blackmore, B., 42.
 Blackwell, C. P., 42.
 Blair, A. W., 40.
 Blair, E. C., 45.
 Blair, J. C., 16.
 Blake, M. A., 40, 41.
 Blanchard, H. L., 62.
 Blasingame, R. U., 52.
 Bledsoe, P. E., 59.
 Bledsoe, R. P., 62.
 Bleile, A. M., 48.
 Blinn, P. K., 10.
 Blish, M. J., 37.
 Bliss, R. K., 19.
 Blizzard, A. W., 20.
 Blizzard, W. L., 50.
 Blodgett, F. H., 58.
 Blodgett, F. M., 42.
 Blodgett, W. K., jr., 42.
 Bloodgood, D. W., 41.
 Bluford, J. H., 46.

- Blumenthal, P. L., 25.
 Bocker, H., 45.
 Bode, I. T., 22.
 Boeing, A., 64.
 Bohstedt, G., 64.
 Bolan, H., 11.
 Bole, S. J., 16.
 Bolley, H. L., 47.
 Bolton, R. R., 20.
 Boltz, G. E., 49.
 Bomberger, F. B., 28.
 Bonazzi, A., 49.
 Bonnett, R. K., 22.
 Bonslagel, C. J., 7.
 Boord, C. E., 48.
 Booth, A. B., 20.
 Boring, A. M., 27.
 Borland, A. A., 52.
 Boss, A., 32.
 Bouquet, A. G. B., 51.
 Bourne, A. I., 29.
 Bourne, R. F., 10.
 Boutelle, C. A., 42.
 Boutwell, P. W., 64.
 Bouyoucos, G. J., 30.
 Bowen, I., 38.
 Bowen, M. Craig-, 37.
 Bower, E. B., 52.
 Bower, H. J., 22.
 Bowman, A. E., 66.
 Bownocker, J. A., 48.
 Boyack, B., 10.
 Boyce, S. S., 30.
 Boyd, T. D., 26.
 Boyd, W. L., 32.
 Boyle, J. E., 42.
 Boynton, M. O., 60.
 Boys, J. A., 42.
 Bozarth, I., 51.
 Brackett, E. E., 38.
 Brackett, R. N., 55.
 Bradford, E. F., 42.
 Bradford, H. E., 38.
 Bradford, W., 13.
 Bradlee, T., 60.
 Bradley, C. A., 13.
 Bradley, G. H., 42.
 Bradley, J. C., 42.
 Brady, St. E., 6.
 Bragg, L. C., 10.
 Bragg, T., 5.
 Braman, W. W., 53.
 Brandes, E. W., 54.
 Brandon, L. B., 55.
 Brandt, I. L., 20.
 Brandt, P. M., 51.
 Branham, R. H., 27.
 Brannin, L., 50.
 Brannon, J. M., 42.
 Branson, E. B., 35.
 Brashear, C. E., 20.
 Bray, C. I., 10.
 Brayton, H. R., 58.
 Breed, R. S., 45.
 Bregger, T., 42.
 Brehm, C. E., 57.
 Bremer, H. E., 42.
 Brew, J. D., 16, 45.
 Brewer, R. E., 20.
 Brewer, S. L., 42.
 Brewster, C. M., 62.
 Brewster, C. S., 51.
 Bridgeforth, G. R., 6.
 Brierley, W. G., 32.
 Briggs, G., 14.
 Bright, J., 45.
 Brink, W. T., 58.
 Brinkley, E. H., 28.
 Brinkley, L. L., 45.
 Brinton, P. H. M., 7.
 Briscoe, C. F., 34.
 Briscoe, J. M., 27.
 Britton, W. E., 11.
 Broberg, H., 22.
 Brock, W. S., 16.
 Brockson, W. I., 16.
 Brodie, A., 15.
 Bronson, W. H., 29.
 Brookens, P. F., 28.
 Brooks, F. M., 16.
 Brooks, T. J., 34.
 Brooks, W. P., 3, 29.
 Broome, F. H., 57.
 Brossard, E. B., 59.
 Broughton, L. B., 28.
 Broughton, T. H., 18.
 Brown, A. E., 8.
 Brown, A. M., 30.
 Brown, B. A., 11.
 Brown, B. S., 27.
 Brown, C., 57.
 Brown, Carlotta, 32.
 Brown, Clara, 32.
 Brown, C. B., 22.
 Brown, C. E., 32.
 Brown, C. W., 30.
 Brown, F. E., 20.
 Brown, F. J., 32.
 Brown, F. L., 22.
 Brown, G. A., 30.
 Brown, G. G., 51.
 Brown, G. L., 56.
 Brown, H. B., 34.
 Brown, H. D., 16.
 Brown, H. L., 13.
 Brown, J. G., 7.
 Brown, L. A., 25.
 Brown, L. F., 40.
 Brown, L. G., 42.
 Brown, M., 57.
 Brown, M-E., 38.
 Brown, M. E., 6.
 Brown, O., 58.
 Brown, P. E., 20.
 Brown, W. G., 35.
 Brown, W. S., 51.
 Browne, T. E., 45.
 Broyles, W. A., 58.
 Brubaker, H. W., 22.
 Bruce, D., 8.
 Brueckner, A. L., 25.
 Brumley, O. V., 48.
 Brundage, A. J., 11.
 Brundage, P. S., 30.
 Bruner, L., 38.
 Brunner, J. J., 20.
 Brunson, A. M., 16.
 Bryan, E. L., 14.
 Bryan, W. A., 14.
 Bryan, W. E., 7.
 Bryant, M. R., 50.
 Bryant, T. R., 25.
 Bryant, V. C., 8.
 Buchanan, G. W., 59.
 Buchanan, J., 20.
 Buchanan, R. E., 20.
 Buchanan, W. S., 6.
 Buckley, J. P., jr., 29.
 Buckley, S. S., 28.
 Buckman, H. O., 42.
 Buckman, R. M., 25.
 Buckner, G. D., 25.
 Buell, M., 64.
 Bugby, M. O., 49.
 Bulkley, G. S., 52.
 Bull, C. P., 32.
 Bull, M. L., 32.
 Bull, S., 16.
 Bullis, D. E., 51.
 Bullock, B. F., 13.
 Bullock, D. S., 64.
 Bumpas, L., 48.
 Bunch, M., 16.
 Bunnell, Mrs. D. L., 8.
 Burchard, C. W., 58.
 Burchard, W., 22.
 Burd, J. S., 8.
 Burdick, H., 54.
 Burdick, R. T., 60.
 Burger, O. F., 8.
 Burgess, C. H., 30.
 Burgess, J. M., 6.
 Burgess, P. S., 15.
 Burgwald, L. H., 60.
 Burk, L. B., 58.
 Burke, E., 37.
 Burkhart, W. C., 13.
 Burkholder, C. L., 18.
 Burkholder, W. H., 42.
 Burleigh, W. F., 55.
 Burleson, D. J., 5.
 Burlison, W. L., 16.
 Burnett, E. A., 38.
 Burnett, J. E., 30.
 Burnett, L. C., 20.
 Burnette, A. C., 26.
 Burns, C. A., 50.
 Burns, G. P., 60.
 Burns, J. C., 58.
 Burnside, H. D., 18.
 Burr, C. G., 61.
 Burr, W., 22.
 Burr, W. W., 38.
 Burrage, F. S., 66.
 Burrill, A. C., 15.
 Burritt, M. C., 42.
 Burroughs, T. P., 35.
 Burson, W. M., 13.

- Burt, F. A., 30.
 Burt, J. H., 22.
 Burton, E. F., 66.
 Burton, M. G., 22.
 Burton, M. L., 32.
 Bushey, A. L., 18.
 Bushnell, L. D., 22.
 Buss, W. J., 49.
 Bussell, F. P., 42.
 Butler, O. R., 40.
 Butterfield, K. L., 3, 29.
 Butzerin, E. B., 22.

 Cadwallader, J. M., 26.
 Cady, Le R., 32.
 Cain, G. D., 26.
 Caine, A. B., 20.
 Caine, G. B., 59.
 Caine, J. T., III, 59.
 Caldwell, A. B., 56.
 Caldwell, D. W., 54.
 Caldwell, F. W., 35.
 Caldwell, L., 22.
 Caldwell, R. E., 18.
 Calhoun, F. H. H., 55.
 Call, H., 48.
 Call, L. E., 22.
 Calland, J. W., 49.
 Calloway, C. J., 6.
 Calloway, R. C., 26.
 Calvert, S., 35.
 Calvin, J. W., 38.
 Camp, W. R., 45.
 Campbell, C. R., 64.
 Campbell, E. G., 58.
 Campbell, G. H., 11.
 Campbell, J., 20.
 Campbell, J. P., 13.
 Campbell, J. Phil., 13.
 Campbell, L. H., 20.
 Campbell, M. H., 64.
 Campbell, O. A., 57.
 Campbell, W. A., 57.
 Camper, M. P., 5.
 Cance, A. E., 29.
 Canfield, S. W., 38.
 Canon, H., 42.
 Cantwell, J. W., 50.
 Cape, J., 22.
 Card, L. E., 11.
 Cardozo, F. H., 6.
 Carey, D. H., 8.
 Carlisle, L. A., 40.
 Carman, J. E., 48.
 Carmichael, B. E., 49.
 Carmichael, W. J., 16.
 Carmody, J. H., 30.
 Carpenter, C. E., 10.
 Carpenter, C. W., 14.
 Carpenter, D. C., 30.
 Carpenter, I. W., 34.
 Carr, R. H., 18.
 Carrero, J. O., 54.
 Carrigan, J. E., 60.
 Carroll, W. E., 59.
 Carter, D. G., 20.

 Carter, E. G., 60.
 Carter, G. C., 18.
 Carter, L. M., 13.
 Carver, G. W., 6.
 Cary, C. A., 5.
 Case, H. C. M., 16.
 Case, J. I., 45.
 Case, J. R., 62.
 Cassiday, H., 58.
 Casteen, M. L., 52.
 Cathcart, C. S., 41.
 Cation, J. G., 20.
 Catlin, C. N., 7.
 Caton, F., 36.
 Caum, E. L., 15.
 Cauthen, E. F., 5.
 Cave, H. W., 63.
 Cavanaugh, G. W., 42.
 Cavert, W. L., 32.
 Center, O. D., 51.
 Cessna, R., 20.
 Chamberlain, F. W., 30.
 Chamberlain, J. S., 29.
 Chamberlain, W. J., 51.
 Chambers, C. L., 5.
 Chambers, C. O., 50.
 Champlin, M., 56.
 Chandler, A. C., 51.
 Chandler, B. A., 42.
 Chandler, E. A., 50.
 Chandler, W. H., 42.
 Chandler, W. L., 42.
 Chapin, A. S., 25.
 Chapman, C. W., 30.
 Chapman, G. H., 29.
 Chapman, N. E., 32.
 Chappell, V. D., 51.
 Charlton, I. D., 32.
 Chase, L. W., 38.
 Chatham, R. C., 46.
 Checkley, J. H., 16.
 Cheney, L., 51.
 Chenoweth, W. W., 29.
 Cheyney, E. G., 32.
 Chidester, F. E., 40.
 Childers, L. F., 36.
 Childs, LeR., 51.
 Childs, R. R., 13.
 Chiles, H. M., 16.
 Ching, K. A., 14.
 Chipman, M. E., 14.
 Chisholm, F. A., 10.
 Chittenden, A. K., 30.
 Chrisman, W. G., 61.
 Christburg, D. H., 37.
 Christensen, A. M., 32.
 Christensen, F. W., 47.
 Christian, W. F., 58.
 Christie, A. W., 8.
 Christie, G. I., 3, 18.
 Chrysler, M. A., 27.
 Chupp, C., 42.
 Church, E., 62.
 Church, J. E., jr., 39.
 Churchill, F. G., 20.
 Churchill, F. R., 60.

 Churchill, G. W., 45.
 Churchill, O. O., 47.
 Churton, F. H., 16.
 Claassen, P. W., 42.
 Clapp, S. C., 45.
 Clark, A. J., 30.
 Clark, A. W., 45.
 Clark, C. E., 45.
 Clark, C. M., 20.
 Clark, C. P., 42.
 Clark, D. B., 18.
 Clark, E. M., 16.
 Clark, H. H., 57.
 Clark, J. S., 27.
 Clark, L. D., 8.
 Clark, O. L., 29.
 Clark, O. M., 55.
 Clark, R. W., 10.
 Clark, S. P., 22.
 Clark, W. D., 29.
 Clark, W. E., 39.
 Clarke, W. T., 8.
 Clarkson, C. S., 41.
 Clausen, R. E., 8.
 Claybaugh, J. H., 38.
 Clayton, E. P., 34.
 Cleland, S. B., 32.
 Clelland, G. S., 34.
 Clemens, L. I., 30.
 Clement, P. E., 47.
 Cleveland, C. R., 40.
 Clevenger, C. B., 64.
 Cleworth, E. B., 32.
 Clink, C. H., 18.
 Clinton, G. P., 11.
 Clutter, J. A., 55.
 Coates, C. E., 26.
 Cobb, C. A., 34.
 Cobleigh, W. M., 37.
 Colby, W. A., 22.
 Cochrane, D. C., 53.
 Cocke, R. P., 61.
 Cockrell, J. B., 58.
 Cody, S. A., 63.
 Coerper, F., 64.
 Coffey, G. N., 16.
 Coffey, J. S., 48.
 Coffey, W. C., 16.
 Coffin, R. L., 29.
 Coggins, C. L., 54.
 Coglon, R. B., 62.
 Cokeley, H. R., 63.
 Colburn, F. E., 20.
 Colby, A. S., 16.
 Cole, A. D., 48.
 Cole, C. G., 20.
 Cole, H. L., 62.
 Cole, L. J., 64.
 Cole, V. E., 11.
 Coleman, G. A., 8.
 Coleman, N. J., 6.
 Coleman, T. A., 18.
 Coll, W. W., 58.
 Collett, R. W., 45.
 Collingwood, G. H., 42.
 Collins, M. W. H., 13.

- Collins, W. O., 13.
 Collison, R. C., 45.
 Collison, S. E., 12.
 Colman, H. N., 62.
 Colón, E., 54.
 Colver, C. W., 15.
 Colville, P. M., 32.
 Colvin, J. C., 13.
 Colwell, R. H., 63.
 Combs, S., 45.
 Combs, W. B., 40, 41.
 Comstock, A. B., 42.
 Comstock, L., 29.
 Condit, I. J., 8.
 Condra, G. E., 38.
 Condrón, L. A., 66.
 Cone, V. M., 10.
 Conger, A. C., 30.
 Conklin, C. T., 48.
 Conklin, E. E., jr., 42.
 Conlon, G., 20.
 Conn, H. J., 45.
 Connaway, J. W., 36.
 Conner, A. B., 58.
 Conner, L. E., 28.
 Conner, S. D., 18.
 Connors, C. H., 41.
 Conradi, A. F., 55.
 Conrey, G. W., 48.
 Conser, H. N., 27.
 Converse, H. T., 55.
 Converse, J. E., 57.
 Conway, M. G., 57.
 Conway, T. J., 58.
 Conway, W. T., 41.
 Cook, C. B., 30.
 Cook, D. H., 41.
 Cook, I. S., jr., 63.
 Cook, L. E., 45.
 Cook, M. T., 40.
 Cook, R. B., 60.
 Cooledge, L. H., 30.
 Cooley, A. C., 41.
 Cooley, F. S., 37.
 Cooley, R. A., 37.
 Cooley, R. B., 54.
 Coons, G. H., 30.
 Cooper, B., 60.
 Cooper, H. P., 52.
 Cooper, J. R., 7.
 Cooper, M. O., 61.
 Cooper, T. P., 25.
 Coover, W. F., 20.
 Cope, R. P., 62.
 Copeland, J. T., 10.
 Copson, G. V., 51.
 Corbett, L. S., 27.
 Corbould, M. K., 49.
 Cordiner, L., 32.
 Cordley, A. B., 51.
 Corriveau, P. E., 54.
 Corson, G. E., 20.
 Cory, E. N., 28.
 Coryell, J., 42.
 Costello, M., 11.
 Cotterman, F. H., 28.
 Cotton, R. T., 54.
 Coughlin, J. W., 62.
 Coulter, J. L., 63.
 Coulter, S., 18.
 Coverdale, J. W., 20.
 Cowan, J., 38.
 Cowan, J. H., 14.
 Cowan, R. W. E., 42.
 Cowart, I. E., 58.
 Cowdrey, M. G., 14.
 Cowell, A. W., 52.
 Cowen, T. N., 6.
 Cowgill, H. B., 54.
 Cowgill, H. J., 51.
 Cowgill, Mrs. T. W., 39.
 Cowles, A. B., 30.
 Cowles, H. T., 54.
 Cowles, I. F., 22.
 Cowles, M. L., 64.
 Cox, J., 60.
 Cox, J. F., 30.
 Cox, J. L., 22.
 Cox, R. E., 59.
 Crabb, G. A., 13.
 Crabb, J. S., 48.
 Craig, A. H., 62.
 Craig, R. A., 18.
 Craig, W. T., 42.
 Craig-Bowen, M., 37.
 Cramer, W., jr., 56.
 Crampton, G. C., 29.
 Crampton, H. B., 37.
 Crampton, H. G., 13.
 Crandall, C. S., 16.
 Crandall, F. K., 54.
 Crane, E. C., 32.
 Crane, G. B., 48.
 Crane, H. L., 63.
 Crane, R. N., 57.
 Cranor, K., 38.
 Crawford, D. L., 14.
 Crawford, N. A., jr., 22.
 Crawford, R. P., 38.
 Cray, W. A., 41.
 Creelman, J., 32.
 Creese, M., 28.
 Gregor, N. M., 25.
 Crider, F. J., 55.
 Crile, A. D., 41.
 Crisler, O. S., 36.
 Crocheron, B. H., 8.
 Crockett, W. H., 60.
 Cromer, C. O., 18.
 Cromwell, R. O., 45.
 Cron, A. B., 58.
 Crooks, N., 57.
 Crosby, C. R., 43.
 Crosby, D. J., 43.
 Crosman, R. L., 10.
 Cross, F. B., 50.
 Cross, L. J., 43.
 Crossland, C. E., 27.
 Crouse, F. L., 62.
 Crawl, V. C., 32.
 Cruess, W. V., 8.
 Cruickshank, R. B., 48.
 Crumbaker, J. W., 22.
 Crumley, J. J., 49.
 Crutcher, W. H., 13.
 Culley, F. H., 20.
 Cullinan, F. P., 18.
 Cullinan, J. M., 64.
 Cumberland, W. W., 32.
 Cummings, C., 52.
 Cummings, M. B., 60.
 Cunningham, C. C. (Ind.), 18.
 Cunningham, C. C. (Kans.), 22.
 Cunningham, G. V., 13.
 Cunningham, J. C., 20.
 Cunningham, W. S., 7.
 Currier, E. L., 37.
 Currin, R. E., 55.
 Curry, B. E., 40.
 Curtis, A. W., 64.
 Curtis, H. E., 25.
 Curtis, O. F., 43.
 Curtis, R. E., 40.
 Curtis, R. S., 45.
 Curtis, R. W., 43.
 Curtis, W. C., 36.
 Curtis, W. E., 27.
 Curtiss, C. F., 19.
 Curtiss, R., 38.
 Daane, A., 59.
 Dacy, A. L., 63.
 Dadisman, A. J., 63.
 Dagger, G. N., 48.
 Dahl, A. von B., 14.
 Dahlberg, A. C., 64.
 Dahlberg, R. C., 32.
 Dales, J. S., 38.
 Dalrymple, W. H., 26.
 Daniel, J. W., 37.
 Damon, E. F., 29.
 Damon, S. C., 54.
 Dana, B. F., 62.
 Danforth, R. E., 40.
 Daniels, A. L., 64.
 Daniels, F. P., 32.
 Dann, A. B., 48.
 Darlington, H. T., 30.
 Darrach, J., 18.
 Darst, W. H., 52.
 Davenport, E., 3, 16.
 Davenport, M., 8.
 Davidson, J. B., 8.
 Davidson, S. F., 45.
 Davis, A. L., 36.
 Davis, A. R., 38.
 Davis, B., 51.
 Davis, B. L., 62.
 Davis, C. C., 56.
 Davis, E. A., 13.
 Davis, E. G., 43.
 Davis, G. J., 62.
 Davis, H. L., 51.
 Davis, H. S., 12.
 Davis, I. G., 11.

- Davis, I. W., 11.
 Davis, J. J., 18.
 Davis, Mary E., 6.
 Davis, Minnie E., 6.
 Davis, T. W., 34.
 Davis, W. E., 22.
 Davis, W. O., 55.
 Davis, W. P., 40.
 Davis, W. R., 22.
 Davisson, B. S., 49.
 Davisson, E. R., 38.
 Dawes, H. E., 56.
 Dawson, R. W., 38.
 Day, H. W., 16.
 Day, J. E., 26.
 Day, S., 28.
 Dean, A. L., 14.
 Dean, F. C., 48.
 Dean, G. A., 22.
 Dean, H. K., 51.
 Dean, W. C., 8.
 DeBaun, R. W., 40.
 Decker, A. D., 62.
 Deemer, R. B., 18.
 de Garmo, M. C., 16.
 DeLong, D. M., 48.
 Delwiche, E. J., 64.
 Demaree, C. C., 43.
 Demarest, W. H. S., 40.
 DeMott, H. V., 43.
 Denning, S. L., 8.
 Denny, J. A., 8.
 Denson, W. P., 26.
 de Ong, E. R., 8.
 DePew, H. F., 40.
 de Regt, A. C., 40.
 Derieux, J. B., 45.
 D'Esopo, M. A., 11.
 Detjen, L. R., 45.
 Detlefsen, J. A., 16.
 Detmers, F., 48.
 De Turk, E. E., 52.
 Dewar, E. S., 45.
 de Zeeuw, R., 30.
 Dick, R. E., 48.
 Dickens, A., 23.
 Dickenson, R. W., 16.
 Dickey, J. B. R., 40.
 Dickson, R. E., 58.
 Didlake, M. LeG., 25.
 Dietrich, W., 32.
 Dillingham, F. T., 14.
 Dilts, W. S., 13.
 Dimock, A. C., 60.
 Dimock, W. W., 20.
 Dinsmore, S. C., 39.
 Dinwoodie, J. T., 56.
 Dix, S. H., 29.
 Dixon, A. M., 45.
 Dixon, B., 10.
 Dobbins, J. T., 45.
 Dobbs, E. C., 6.
 Dodds, G. S., 36.
 Dodge, H. J., 64.
 Dodson, W. R., 3, 26.
 Doerner, A. M., 23.
 Deherty, E. H., 51.
 Dolman, A. M., 51.
 Dolt, M. L., 47.
 Donaldson, O. M., 6.
 Doneghue, R. C., 47.
 Dennell, O. G., 46.
 Doran, E. B., 26.
 Dorchester, C. S., 20.
 Dore, W. H., 8.
 Dorner, H. B., 16.
 Dorsey, E., 43.
 Dorsey, H., 63.
 Dorsey, J. M., 32.
 Dorsey, L. M., 27.
 Dorsey, M. J., 32.
 Doryland, C. J. T., 47.
 Doten, S. B., 39.
 Doty, H. S., 23.
 Doty, R. E., 15.
 Doubt, W. A., 58.
 Dougherty, J. E., 8.
 Douglas, J. F. H., 58.
 Douglass, A. E., 7.
 Douglass, E., 10.
 Deuglass, T. R., 20.
 Dover, M. V., 36.
 Dow, B. K., 11.
 Dowdle, L. P., 13.
 Dewell, C. T., 50.
 Down, E. E., 31.
 Downing, G. J., 15.
 Downing, J. E., 13.
 Dox, A. W., 20.
 Doyle, L. P., 18.
 Drain, H. D., 29.
 Drew, J. M., 32.
 Drinkard, A. W., jr., 61.
 Drisdale, C. B., 59.
 Drum, B., 62.
 Dryden, J., 51.
 Dudley, J. B., 46.
 Duffee, F. W., 11.
 Duggar, J. F., 3, 5.
 Duley, F. L., 36.
 Dunbar, B. A., 56.
 Dunbar, S. B., 26.
 Duncan, L. N., 5.
 Dunford, C. S., 31.
 Dungan, G. H., 16.
 Dunlap, F., 36.
 Dunn, R., 20.
 Dunn, R. C., 58.
 Dunnington, S., 62.
 Dunton, L., 23.
 Dupertuis, P. H., 66.
 Durand, E. J., 36.
 Durant, A. J., 36.
 Durham, H., 23.
 Durham, S. B., 34.
 Durrant, E. P., 48.
 Durrel, L. W., 20.
 Dusham, E. H., 43.
 Dustman, R. B., 63.
 Dutcher, R. A., 32.
 Dutton, G. C., 43.
 Dutton, W. C., 31.
 Du Valle, S. H., 37.
 Dvorachek, H. E., 7.
 Dworak, M., 26.
 Dyche, R. O., 7.
 Dyer, D. C., 12.
 Dykstra, R. R., 23.
 Dynes, O. W., 43.
 Eames, A. J., 43.
 Earhart, R. F., 48.
 Easley, C. W., 27.
 Eastman, E. E., 20.
 Eastman, E. R., 43.
 Eaton, C. W., 27.
 Eaton, T. H., 11.
 Eaton, W. H., 45.
 Ebner, U. S., 47.
 Eby, H. L., 66.
 Eckert, J. E., 45.
 Eckles, C. H., 36.
 Eckman, O. L., 40.
 Eckstein, H. C., 16.
 Edgerton, C. W., 26.
 Edmiston, H. D., 52.
 Edmond, H. D., 11.
 Edmonds, J. L., 16.
 Edmonds, M. E., 31.
 Edmundson, W. C., 15.
 Edson, E. O., 31.
 Edwards, A. L., 33.
 Edwards, C. W., 14.
 Edwards, H., 54.
 Edwards, L. S., 34.
 Edwards, R. W., 58.
 Edwards, W. E. J., 31.
 Eggington, G. E., 10.
 Eggleston, J. D., 61.
 Ekblaw, K. J. T., 23.
 Eklof, C. M., 15.
 Elder, C., 23.
 Eldredge, B. R., 60.
 Eldridge, J. M., 56.
 Elliot, H. M., 58.
 Ellenberger, H. B., 60.
 Ellenwood, C. W., 49.
 Ellett, W. B., 61.
 Elliott, F. W., 52.
 Elliott, J. A., 7.
 Elliott, N. R., 25.
 Elliott, P., 48.
 Ellis, A., 27.
 Ellis, J., 52.
 Ellis, O. L., 16.
 Else, J. N., 52.
 Elser, W. L., 41.
 Elwood, C. F., 8.
 Elwood, P. H., 48.
 Emberson, R. H., 36.
 Embleton, H., 50.
 Embody, G. C., 43.
 Emerson, F. V., 26.
 Emerson, M. F., 40.
 Emerson, P., 28.
 Emerson, R. A., 43.
 Ende, C. L. von, 15.
 Enders, H. E., 18.

- Engbretson, A. E., 51.
 Englis, D. T., 16.
 English, H., 20.
 Eppe, W. F., 18.
 Erb, E. S., 52.
 Erdman, H. E., 48.
 Erdman, L. W., 28.
 Erf, O., 48.
 Erickson, G., 28.
 Erickson, L., 43.
 Erickson, T. A., 33.
 Ericson, A., 33.
 Erwin, A., 56.
 Erwin, A. T., 20.
 Espinosa, G., 42.
 Essary, S. H., 57.
 Esten, W. M., 11.
 Estil, H. W., 7.
 Estill, J. S., 26.
 Eswine, H. E., 48.
 Etheridge, W. C., 36.
 Eubank, M., 64.
 Eustace, H. J., 31.
 Evans, B. V., 34.
 Evans, C. M., 58.
 Evans, F. N., 16.
 Evans, G., 45.
 Evans, J. A., 58.
 Evans, P., 37.
 Evans, P. N., 18.
 Evans, R. J., 60.
 Evans, S. W., 55.
 Evans, W. L., 48.
 Everett, G. A., 43.
 Everett, G. D., 58.
 Evvard, J. M., 20.
 Ewan, A. E., 25.
 Ewell, A. D., 59.
 Ewell, Mrs. R. L., 59.
 Ewing, A. L., 33.
 Ewing, D. T., 31.
 Ewing, H. E., 20.
 Ewing, P. V., 58.
 Ewing, S. P., 60.
 Fabian, F. W., 31.
 Fagan, F. N., 52.
 Fahrnkopf, H. F. T., 16.
 Fain, J. R., 13.
 Fairbank, J. P., 62.
 Fairchild, L. H., 23.
 Falconer, J. I., 48.
 Farley, A. J., 40, 41.
 Farley, G. L., 29.
 Farnham, A. A., 52.
 Farnham, F. R., 45.
 Farnham, M. E., 43.
 Farr, C. H., 58.
 Farrar, R. K., 20.
 Farrington, E. H., 64.
 Fate, J. E., 38.
 Faulwetter, R. C., 55.
 Faurot, F. W., 36.
 Faux, G., 60.
 Faville, A. D., 66.
 Faville, G. C., 62.
 Fawcett, C. J., 40.
 Fawcett, H. S., 8.
 Fay, L. E., 57.
 Fecht, E. F., 23.
 Fedde, M. S., 38.
 Feeley, R. O., 55.
 Feldman, W., 10.
 Feminear, M., 5.
 Fenton, F. C., 36.
 Fenton, H. H., 23.
 Fenwick, I. H., 62.
 Ferguson, C. W., 5.
 Ferguson, D. L., 64.
 Ferguson, J. A., 52.
 Ferguson, M., 20.
 Fermery, G. E., 9.
 Fernald, C. H., 29.
 Fernald, H. T., 29.
 Ferrin, E. F., 20.
 Ferris, E. B., 34.
 Ferry, E. L., 11.
 Ferry, E. S., 18.
 Fetzer, R. A., 45.
 Fewell, L., 23.
 Field, A. M., 33.
 Field, J. U., 25.
 Fields, W. S., 7.
 Fife, R., 48.
 Filler, C. G., 5.
 Filley, H. C., 38.
 Filley, W. O., 11.
 Fink, D. E., 61.
 Fippin, E. O., 43.
 Firor, G. W., 13.
 Firor, J. W., 13.
 Fischer, C. R., 40.
 Fishburn, H. P., 15.
 Fisher, F. A., 16.
 Fisher, G., 20.
 Fisher, H. J., 33.
 Fisher, M. L., 18.
 Fisher, W. I., 43.
 Fiske, F. C., 60.
 Fiske, J. G., 41.
 Fitch, C. L., 20.
 Fitch, C. P., 33.
 Fitch, J. B., 23.
 Fitch, W. Q., 18.
 Fite, A. B., 42.
 Fitterer, J. C., 66.
 Fitts, E. B., 51.
 Fitz, L. A., 23.
 Fitzgerald, M. L., 47.
 Fitzgerald, N., 26.
 Fitzpatrick, H. M., 43.
 Fitzpatrick, W. W., 55.
 Fjeldsted, E. J., 51.
 Fleming, C. E., 39.
 Fleming, G. E., 16.
 Fletcher, L. J., 9.
 Fletcher, S. W., 52.
 Flexer, E., 16.
 Flint, L. H., 60.
 Florence, L., 43.
 Flossfeder, F. C. H., 9.
 Flower, D. H., 31.
 Floyd, B. F., 12.
 Floyd, E. V., 23.
 Floyd, W. L., 12.
 Fluharty, L. W., 15.
 Fluke, C. L., jr., 64.
 Foard, W. E., 10.
 Fogler, R. H., 27.
 Fohrman, M. H., 36.
 Folker, A. M., 33.
 Folsom, D., 45.
 Foltz, L. S., 10.
 Foord, J. A., 29.
 Foot, L., 7.
 Forbes, E. B., 49.
 Ford, C. M., 37.
 Ford, J. C., 5.
 Ford, J. H., 58.
 Ford, O. W., 18.
 Foreman, E. C., 31.
 Foreman, E. V., 52.
 Forman, L. W., 20.
 Forrest, E., 37.
 Forster, G. W., 65.
 Foster, J. H., 58.
 Foster, L., 42.
 Foster, L. G., 20.
 Foster, W. A., 20.
 Foulk, C. W., 48.
 Foust, H. L., 47.
 Fowlds, M., 56.
 Fowler, C. C., 20.
 Fowler, Mrs. M. N., 9.
 Fowler, Z. F., 15.
 Fox, D. S., 52.
 Fox, E. F., 28.
 Fox, F. E., 23.
 Frame, N. T., 63.
 France, L. V., 33.
 Francis, M., 58.
 Frandsen, J. H., 38.
 Frandsen, P., 39.
 Frank, A., 62.
 Franklin, H. J., 29.
 Franklin, J. M., 42.
 Fraps, G. S., 58.
 Fraser, A. C., 43.
 Fraser, G. W., 11.
 Fraser, W. J., 16.
 Frazier, J. S., 14.
 Frear, D. W., 47.
 Frear, W., 52.
 Fred, E. B., 65.
 Frederick, E. L., 45.
 Frederick, H. J., 60.
 Fredholm, A. J., 54.
 Freeborn, S. B., 9.
 Freeman, B., 55.
 Freeman, E. M., 3, 33.
 Freeman, F. R., 27.
 Freeman, G. F., 7.
 Freeman, V. A., 31.
 French, B. E. L., 31.
 French, F. E., 42.
 French, H. T., 10.
 French, W. H., 31.
 Friedemann, T. E., 31.
 Friedemann, W. G., 50.
 Frier, G. M., 18.
 Fries, J. A., 53.

- Fromme, F. D., 61.
 Fromme, N. K., 47.
 Froning, H. B., 48.
 Frost, H. B., 9.
 Frost, W. D., 65.
 Frost, W. S., 43.
 Fry, J. M., 53.
 Fuller, F. D., 58.
 Fuller, F. E., 37.
 Fuller, J. G., 65.
 Fuller, J. M., 40.
 Fulton, B. B., 45.
 Fulton, K. V., 59.
 Funchess, M. J., 5.
 Futrall, J. C., 7.

 Gaddis, L. R., 18.
 Gaddis, P. L., 38.
 Gaessler, W. G., 20.
 Gage, G. E., 29.
 Gage, G. R., 43.
 Gage, O. A., 40.
 Gail, F. W., 15.
 Gain, J. H., 38.
 Gaines, E. F., 62.
 Gainey, P. L., 23.
 Galehouse, D. W., 47.
 Galloway, M., 7.
 Galpin, C. J., 65.
 Gamble, M. E., 18.
 Gammack, F. S., 62.
 Garbon, J. V., 56.
 Garcia, F., 41.
 Gardner, F. D., 53.
 Gardner, G., 60.
 Gardner, J. S., 53.
 Gardner, M. M., 53.
 Gardner, V. R., 51.
 Gardner, W. A., 5.
 Garey, L. F., 10.
 Garman, H., 25.
 Garman, P., 28.
 Garmo, M. C. de, 16.
 Garren, G. M., 45.
 Garrett, F. W., 16.
 Garrett, J. B., 26.
 Garrigus, H. L., 11.
 Garrison, W. D., 55.
 Garton, R. I., 54.
 Garvin, A. L., 18.
 Garvin, E. M., 31.
 Garwood, R. S., 54.
 Gaskill, E. F., 29.
 Gasser, G. W., 6.
 Gaston, C. P., 5.
 Gates, B. N., 29.
 Gates, W. H., 26.
 Gatewood, R., 23.
 Gay, C. W., 33.
 Gay, M. C., 13.
 Gayle, H. K., 34.
 Gaylord, F. C., 18.
 Gearhart, C. A., 49.
 Geauque, H. A., 31.
 Gee, W. P., 55.
 Geib, W. J., 65.
 Gentle, G. E., 16.
 Gentner, L. G., 65.

 George, A. G., 38.
 George, C. R., 18.
 George, L. R., 18.
 Georgeson, C. C., 6.
 Georgia, A. E., 43.
 Gere, C. M., 61.
 Gericke, W. F., 9.
 Gernert, W. B., 16.
 Gettemy, W. S., 20.
 Getty, R. E., 23.
 Gibbens, E., 5.
 Gibson, A. W., 43.
 Gibson, H. H., 20.
 Gibson, J. A., 36.
 Gibson, O. E., 62.
 Giddings, N. J., 63.
 Gieger, M., 34.
 Giere, C., 33.
 Gieseker, L. F., 37.
 Gilbert, A. G., 62.
 Gilbertson, G., 56.
 Gile, B. M., 33.
 Gile, P. L., 54.
 Giles, J. K., 13.
 Gilkerson, H. C., 16.
 Gilkey, H. M., 51.
 Gilkey, R., 43.
 Gillett, R. L., 43.
 Gillette, C. P., 10.
 Gillette, L. S., 20.
 Gillison, B., 55.
 Gilmore, A., 62.
 Gilmore, J. W., 9.
 Gilmore, W. J., 51.
 Gilson, W. L., 31.
 Giltner, W., 31.
 Gingery, J. B., 23.
 Gladwin, F. E., 45.
 Glasgow, G., 23.
 Glasgow, H., 45.
 Glass, J. S., 20.
 Gleason, J., 43.
 Glenn, M. A., 5.
 Glick, E. E., 16.
 Glise, A. E., 33.
 Glover, G. H., 10.
 Gloyer, W. O., 45.
 Gobble, C. F., 18.
 Goddard, M., 56.
 Godfrey, G. H., 20.
 Godin, F. J., 54.
 Godkin, J., 13.
 Goeder, F. P., 10.
 Goff, R. A., 14.
 Goldthrope, H. C., 60.
 Good, E. S., 25.
 Goodacre, H., 10.
 Goodale, H. D., 29.
 Gooding, J. H., 62.
 Gooding, T. H., 38.
 Goodling, C. L., 53.
 Goodrich, A. M., 62.
 Goodrich, H. P., 20.
 Goodwin, O. T., 13.
 Gordon, A. N., 25.
 Gordon, C. E., 29.
 Gordon, C. H., 57.
 Gordon, H. B., 40.

 Gordon, K. T., 27.
 Gordon, R. A., 35.
 Gerham, W. R., 53.
 Gortner, R. A., 33.
 Goss, E. F., 15.
 Goss, L. W., 23.
 Goss, R. W., 12.
 Gossard, H. A., 49.
 Gossard, O. P., 49.
 Gott, E. J., 25.
 Gourley, J. H., 40.
 Gow, R. M., 7.
 Gowen, J. W., 27.
 Graber, L. F., 65.
 Graber, M. A., 48.
 Grabill, R. B., 10.
 Grady, R. I., 49.
 Graham, C. K., 62.
 Graham, J. C., 29.
 Graham, K. H., 12.
 Graham, R., 16.
 Graham, S. A., 33.
 Graihger, W. E., 57.
 Gramlich, H. J., 38.
 Grant, A. S., 33.
 Grantham, A. E., 12.
 Grantham, G. M., 31.
 Graul, E. J., 65.
 Graves, C. H., 31.
 Graves, L. E., 6.
 Gravitt, W. T., 6.
 Gray, C. E., 16.
 Gray, D. T., 45.
 Gray, F. J., 34.
 Gray, G. P., 9.
 Gray, J. C., 53.
 Gray, W. D., 28.
 Greaves, J. E., 60.
 Green, A. I., 16.
 Green, B. J., 56.
 Green, C. R., 29.
 Green, G. R., 53.
 Green, H. L., 23.
 Green, R. M., 36.
 Green, R. W., 43.
 Green, S. N., 49.
 Green, W. J. (Ohio), 49.
 Green, W. J. (Okla.), 50.
 Green, W. W., 61.
 Greenbank, W. K., 49.
 Greene, C. W., 6.
 Greene, G. O., 23.
 Greene, J. H., 16.
 Greene, L., 18.
 Greene, M. H., 60.
 Greene, S. W., 34.
 Gregg, C. J., 56.
 Gregg, J. E., 62.
 Gregg, J. W., 9.
 Gregor, D. K., 36.
 Gregory, C. T., 43.
 Gregory, H. W., 18.
 Gridley, R. M., 13.
 Griffin, F. L., 43.
 Griffith, J. P., 45.
 Griggs, R. F., 48.
 Grimes, M. F., 53.
 Grimes, W. E., 23.

- Grindley, H. S., 17.
 Griswold, D. T., 58.
 Gromer, S. D., 36.
 Gross, E. G., 65.
 Gross, E. R., 35.
 Gross, L. G., 43.
 Grossman, J. D., 20.
 Groth, M., 40.
 Grover, E. L., 31.
 Groves, J. F., 66.
 Guard, W. F., 20.
 Guilbeau, P. L., 26.
 Guild, F. N., 7.
 Guilette, D. L., 62.
 Guise, C. H., 43.
 Gunderson, A. J., 17.
 Gunn, R. V., 65.
 Gunnels, C. E., 38.
 Gunness, C. I., 29.
 Gunson, T., 31.
 Gurjar, A. M., 33.
 Guseman, R. R., 63.
 Gusler, G., 17.
 Gustafson, A. F., 17.
 Guthrie, D. V., 26.
 Guthrie, E. S., 43.
 Guthrie, J. E., 20.
 Guthrie, M., 36.
 Guy, J. S., 7.
 Guy, W. L., 47.
 Guyton, T. L., 49.
 Gwinn, A., 50.
 Gwinn, E., 50.
 Haas, A. R., 53.
 Haber, V. R., 43.
 Hackedorn, H., 36.
 Hackleman, J. C., 36.
 Hadley, C. H., jr., 53.
 Hadley, F. B., 65.
 Hadley, M. B., 12.
 Hadley, P. B., 54.
 Haecker, T. L., 33.
 Hafner, V. E., 58.
 Hagan, H. R., 60.
 Hagedorn, F. A., 31.
 Hagen, R. M., 9.
 Haggard, M. J., 33.
 Haggart, M. H., 23.
 Hahn, H. M., 10.
 Haigh, L. D., 36.
 Hale, W. J., 57.
 Haley, D. E., 53.
 Hall, E. E., 55.
 Hall, F. H., 45.
 Hall, H. M., 9.
 Hall, J. H., jr., 45.
 Hall, O. E., 23.
 Hall, S. W., 17.
 Hall, W. M., 26.
 Halliday, E. G., 10.
 Halligan, C. P., 31.
 Hallman, E. T., 31.
 Hallsted, A. L., 23.
 Halm, H. H., 23.
 Halpin, J. G., 65.
 Halsted, B. D., 41.
 Halverson, J. O., 49.
 Ham, E. S., 43.
 Ham, F. W., 37.
 Hamilton, C. C., 43.
 Hamilton, J. M., 37.
 Hamilton, J. O., 23.
 Hamilton, R., 27.
 Hamilton, W. H., 41.
 Hammer, B. W., 20.
 Hammond, H. S., 51.
 Hammond, J. W., 49.
 Hammond, L. D., 23.
 Hammond, R. L., 27.
 Hampton, T. M., 37.
 Hancock, F. B., 39.
 Hancy, A. J., 43.
 Hand, W. F., 35.
 Handschin, W. F., 16.
 Hanger, W. E., 48.
 Hanke, M. T., 47.
 Hankinson, J. H., 41.
 Hannas, R. R., 41.
 Hansen, H. P., 20.
 Hansen, N. E., 56.
 Hansen, R., 17.
 Hanson, E. O., 33.
 Hanson, H. H., 27.
 Hanson, L. P., 65.
 Haralson, C., 33.
 Harbaugh, A. E., 14.
 Hardenburg, E. V., 43.
 Harding, A. S., 56.
 Harding, H. A., 17.
 Hardman, G., 39.
 Hardy, J. I., 66.
 Hare, C. L., 5.
 Hare, F. C., 55.
 Hargraves, S. L., 13.
 Hargrove, W. H., 36.
 Haring, C. M., 9.
 Harkey, R. M., 58.
 Harkins, L. A., 37.
 Harlan, M. L., 18.
 Harling, E. P., 23.
 Harman, M. T., 23.
 Harmon, S. C., 61.
 Harnden, E. E., 50.
 Harned, H. H., 35.
 Harned, R. W., 35.
 Harper, C., 18.
 Harper, J. W., 56.
 Harper, M. W., 43.
 Harrington, F. M., 20.
 Harris, D. D., 6.
 Harris, F. S., 59.
 Harris, H. H., 37.
 Harris, J. M., 27.
 Harris, N. L., 7.
 Harris, R. T., 65.
 Harris, W. G., 61.
 Harrison, A. K., 29.
 Harrison, B. M., 20.
 Harrison, M., 23.
 Hart, E. B., 65.
 Hart, G. H., 9.
 Hart, H. B., 20.
 Hart, J. C., 61.
 Hart, J. F., jr., 13.
 Hart, L. C., 13.
 Hart, W. R., 29.
 Hartenbower, A. C., 23.
 Harter, G. A., 12.
 Hartley, C. H., 63.
 Hartman, L. W., 39.
 Hartman, S. C., 49.
 Hartman, W. J., 37.
 Hartsuch, B. E., 31.
 Hartwell, B. L., 54.
 Hartzell, A., 20.
 Hartzell, F. Z., 45.
 Hartzog, J. R., 43.
 Harvey, L. E., 43.
 Harvey, R. N., 58.
 Harvey, T. W., 18.
 Hasbrouck, P. B., 29.
 Haseman, L., 36.
 Haskins, H. D., 29.
 Hastings, E. G., 65.
 Hastings, W. G., 60.
 Hatch, K. L., 65.
 Hathaway, C. L., 25.
 Hathaway, M. C., 48.
 Hathorn, I., 33.
 Hauser, A. J., 20.
 Hauser, M. A., (Iowa), 20.
 Hauser, M. A., (N. J.), 41.
 Hausman, L. A., 43.
 Havner, H. H., 53.
 Hawkes, A. H., 20.
 Hawkins, L. S., 43.
 Hawley, I. M., 43.
 Hayden, A., 20.
 Hayden, C. C., 49.
 Hayden, H. E., jr., 58.
 Hayes, A., 20.
 Hayes, F. M., 9.
 Hayes, H. K., 33.
 Hayes, J. B., 65.
 Hayes, M. E., 11.
 Hayes, M. L., 58.
 Hayes, P. H., 50.
 Hayes, W. P., 23.
 Hayes, W. W., 6.
 Haynes, M. M., 10.
 Hays, F. A., 12.
 Hays, H. A., 36.
 Hays, M. E., 58.
 Hayward, H., 12.
 Haywood, W. G., 45.
 Hazard, B. E., 43.
 Hazen, L. E., 43.
 Headen, W. P., 10.
 Headlee, T. J., 41.
 Heald, F. D., 62.
 Healy, D. J., 25.
 Hean, C. S., 65.
 Heard, H. C., 7.
 Hebard, F. F., 31.
 Hebard, G. R., 66.
 Hechler, W. R., 20.
 Hecht, A. G., 29.
 Heck, A. F., 62.
 Heck, C. M., 45.
 Hedges, C. C., 58.

- Hedrick, U. P., 45.
 Hedrick, W. O., 31.
 Hegnauer, L., 62.
 Heil, H. G., 48.
 Heinicke, A. J., 43.
 Helbing, C., 26.
 Helm, C. A., 36.
 Helme, N., 54.
 Helmick, B. C., 33.
 Helser, M. D., 20.
 Helyar, F., 41.
 Helyar, J. P., 41.
 Henderson, A. M., 20.
 Henderson, L. B., 57.
 Henderson, W. W., 60.
 Hendren, L. L., 13.
 Hendricks, J. F., 38.
 Hendrickson, A. H., 9.
 Hendry, G. W., 9.
 Henke, L. A., 14.
 Henley, K. L., 58.
 Henninger, R. W., 29.
 Henricksen, H. C., 54.
 Henry, C., 18.
 Henry, D. H., 55.
 Henry, M. F., 43.
 Henry, W. A., 65.
 Henry, W. M., 12.
 Hensel, F. W., jr., 58.
 Hepburn, N. W., 17.
 Hepburn, W. M., 18.
 Hepler, J. R., 40.
 Hepner, F. E., 66.
 Hepworth, M. M., 63.
 Herman, V. R., 45.
 Herms, W. B., 9.
 Herrick, G. W., 43.
 Herrick, R. S., 20.
 Herrington, G. L., 12.
 Herron, L. E., 62.
 Herron, L. G., 35.
 Hertz, H. L., 20.
 Hervey, G. W., 36.
 Herzer, F. H., 7.
 Hesler, L. R., 43.
 Hester, C. E., 26.
 Hetzel, R. D., 3, 40.
 Heuser, G. F., 43.
 Hiatt, S. W., 12.
 Hibbard, B. H., 65.
 Hibbard, H., 36.
 Hibbard, P. L., 9.
 Hibbard, R. P., 31.
 Hibben, R. C., 38.
 Hibberd, S. L., 25.
 Hibshman, E. K., 53.
 Hickman, A. S., 26.
 Hickman, C. W., 15.
 Hieronymus, R. E., 17.
 Higgins, B. B., 14.
 Higgins, J. E., 14.
 Higgins, L. A., 35.
 Higgins, M. V., 66.
 Higley, L. A., 42.
 Hildebolt, H. C., 17.
 Hill, A. R., 3, 35.
 Hill, C. E., 51.
 Hill, C. J., 9.
 Hill, C. O., 57.
 Hill, G. R., jr., 60.
 Hill, H. H., 61.
 Hill, J. A., 66.
 Hill, J. B., 53.
 Hill, M. E., 43.
 Hill, R. G., 46.
 Hill, R. L., 28.
 Hill, Mrs. W. G., 14.
 Hillhouse, E., 43.
 Hilliker, B., 20.
 Hills, J. L., 3, 60.
 Hills, T. L., 15.
 Hills, T. M., 48.
 Hillstrom, E., 65.
 Hilyer, J. V., 13.
 Hinds, W. E., 5.
 Hine, G. S., 23.
 Hine, J. S., 48.
 Hirst, C. T., 60.
 Hitch, H. J., 29.
 Hitchcock, E. B., 15.
 Hite, B. H., 63.
 Hoag, E. F., 65.
 Hoagland, D. R., 9.
 Hobbs, C. W., 23.
 Hobbs, W. R., 48.
 Hobson, I. L., 66.
 Hochbaum, H. W., 15.
 Hodgkiss, H. E., 45.
 Hodgson, A. N., 61.
 Hodgson, E. R., 61.
 Hodgson, R. W., 9.
 Hoerner, G. R., 33.
 Hoffer, G. N., 18.
 Hoffman, I. C., 10.
 Hoffman, M. H., 20.
 Hoffmann, G. P., 55.
 Hofmann, F. W., 55.
 Hogan, A. G., 23.
 Hoggenson, J. C., 60.
 Hogstad, A., jr., 56.
 Holben, F. J., 53.
 Holdaway, C. W., 61.
 Holden, B. A., 60.
 Holden, E. D., 65.
 Holden, J. A., 38.
 Holding, W. A., 57.
 Holland, E. B., 29.
 Holland, E. O., 62.
 Holland, R. E., 38.
 Hollinger, A. H., 36.
 Hollister, B. M., 31.
 Hollister, S. P., 11.
 Holm, G. E., 33.
 Holman, A., 23.
 Holmes, R. M., 27.
 Holmes, W., 49.
 Holton, E. L., 23.
 Holtz, H. F., 62.
 Hood, E. G., 29.
 Hood, G. W., 38.
 Hooper, J. J., 25.
 Hocver, J. M., 15.
 Hoover, M., 66.
 Hope, D., 41.
 Hope, L., 17.
 Hopkins, A. W., 65.
 Hopkins, C. G., 17.
 Hopkins, E. F., 43.
 Hopkins, H. C., 6.
 Hopper, H. A., 43.
 Hopper, H. L., 35.
 Hopper, T. H., 36.
 Hoppert, E. H., 38.
 Hopt, E., 38.
 Horne, W. T., 9.
 Horner, J. T., 50.
 Horsfield, B. T., 46.
 Horst, H. E., 48.
 Hosmer, R. S., 43.
 Hostetler, E., 46.
 Hostetter, A. B., 33.
 Hotchkiss, W. S., 58.
 Hottes, A. C., 48.
 Houghton, C. O., 12.
 House, E. B., 10.
 Houser, J. S., 49.
 Houser, T., 49.
 Housholder, B. W., 31.
 Hoversten, A., 33.
 Howard, C. G., 59.
 Howard, D. J., 28.
 Howard, G. F., 33.
 Howard, H., 6.
 Howard, J. T., 29.
 Howard, R. F., 38.
 Howard, W. L., 9.
 Howarth, H., 10.
 Howe, A., 18.
 Howe, F. B., 20.
 Howe, G. H., 45.
 Howell, C. E., 62.
 Hoy, H. H., 56.
 Hubert, B. F., 56.
 Huddleson, I. F., 31.
 Hudelson, R. R., 36.
 Hudson, C. R., 46.
 Hudson, L., 13.
 Hudson, R. S., 31.
 Huelsen, W. A., 18.
 Huff, S. B., 43.
 Hufford, C. T., 17.
 Hughes, D. D., 48.
 Hughes, E. H., 36.
 Hughes, H., 13.
 Hughes, H. D., 20.
 Hughes, J. L., 11.
 Hughes, J. S., 23.
 Hulbert, A. M., 41.
 Hulbert, H. W., 15.
 Hulett, F., 33.
 Hull, D. R., 62.
 Hultz, F. S., 53.
 Humbert, E. P., 58.
 Humble, C. W., 42.
 Hume, A. N., 56.
 Hume, C. M., 57.
 Hummel, W. G., 9.
 Humpherys, L., 60.
 Humphrey, G. C., 65.
 Humphrey, J. A., 20.
 Humphrey, J. R., 25.

- Hungerford, DeF., 7.
Hungerford, E. H., 56.
Hungerford, J. D., 42.
Hunn, A. E., 43.
Hunn, C. E., 43.
Hunt, A. A., 7.
Hunt, A. E., 65.
Hunt, C. H., 62.
Hunt, F., 23.
Hunt, L. W., 62.
Hunt, R. E., 61.
Hunt, T. F., 3, 8.
Hunt, T. Fr., 9.
Hunter, C. A., 53.
Hunter, J. M., 41.
Hunter, Mrs. M. E., 58.
Hunter, O. W., 23.
Hurd, C. N., 51.
Hurd, J. L., 61.
Hurd, L. M., 43.
Hurd, W. D., 3, 29.
Huston, E., 25.
Huston, R. C., 31.
Hutcheson, J. R., 61.
Hutcheson, T. B., 61.
Hutchinson, G., 15.
Hutchinson, J., 17.
Hutchinson, W. L., 55.
Hutchison, C. B., 43.
Hutchison, J. L., 48.
Hutt, W. N., 46.
Hutton, C. A., 57.
Hutton, J., 10.
Hutton, J. G., 56.
Hutton, J. P., 31.
Hyde, A., 64.
Hyde, H., 15.
Hyslop, G. R., 51.
Hytree, E. C., 37.
- Iddings, E. J., 15.
Ikeler, K. C., 20.
Iler, W. D., 25.
Imel, P. R., 23.
Ince, J. W., 47.
Ingalls, E. L., 61.
Ingersoll, B., 20.
Ingram, E., 25.
Ingrim, R. C., 9.
Inman, C. C., 27.
Inman, C. F., 55.
Inman, O. L., 15.
Irwin, G. W., 35.
Isenberg, J. E., 53.
Ish, J. G., jr., 8.
Israelson, O. W., 60.
Itano, A., 29.
Ives, F. W., 48.
Ivey, J. E., 46.
- Jackson, C. F., 40.
Jackson, H., 14.
Jackson, H. C., 43.
Jackson, H. S., 18.
Jackson, J. Q., 46.
Jackson, J. W., 58.
Jackson, Mrs. N. P., 58.
- Jackson, S. C., 35.
Jackson, W. E., 58.
Jacob, M., 57.
Jacobson, C. A., 39.
Jacoby, F. S., 48.
Jaffa, M. E., 9.
Jager, F., 33.
Jagger, I. C., 43.
Jahnke, E. W., 38.
Jahr, M. E., 17.
Jakeman, H. W., 39.
James, C., 40.
James, E. J., 16.
James, J. A., 65.
James, W. P., 17.
Jamison, A. W., 17.
Jamison, M. L., 46.
Jamison, O. A., 29.
Jardine, W. M., 3, 22.
Jarnagin, M. P., 13.
Jarrell, T. D., 28.
Jason, W. C., 12.
Jauncey, G. E. M., 36.
Jefferson, E., 12.
Jenkins, E. H., 11.
Jenkins, E. L., 38.
Jenkins, E. W., 12.
Jenkins, J. M., 26.
Jenks, F. B., 61.
Jennings, W. J., 35.
Jennison, H. M., 38.
Jensen, G. H., 62.
Jensen, K., 47.
Jensen, O. F., 20.
Jerdan, A. L., 46.
Jernigan, W. J., 7.
Jesseman, L. D., 53.
Jeter, F. H., 46.
Jewett, H. H., 25.
Johannsen, O. A., 43.
Johnson, A., 39.
Johnson, A. G. (Oreg.), 51.
Johnson, A. G. (Wis.), 65.
Johnson, C. D., 36.
Johnson, C. H., 48.
Johnson, D. R., 50.
Johnson, E. C., 3, 22.
Johnson, E. P., 42.
Johnson, H. E., 31.
Johnson, H. W., 21.
Johnson, I. B., 56.
Johnson, J., 65.
Johnson, J. M., 46.
Johnson, M. M., 39.
Johnson, M. O., 14.
Johnson, O. M., 48.
Johnson, O. N., 65.
Johnson, O. R., 36.
Johnson, S. A., 10.
Johnson, S. B., 7.
Johnson, T. C., 61.
Johnson, W. T., 62.
Johnston, A. D., 33.
Johnston, E. S., 28.
Jones, C. H., 61.
Jones, C. P., 29.
Jones, C. R., 10.
- Jones, D. F., 11.
Jones, E. (Mass.), 29.
Jones, E. (Wash.), 62.
Jones, E. B., 13.
Jones, E. H., 23.
Jones, E. I., 61.
Jones, E. R., 65.
Jones, F. R., 35.
Jones, G. R., 13.
Jones, H. M., 23.
Jones, J. J., 6.
Jones, J. M. (Tex.), 58.
Jones, J. M. (Va.), 61.
Jones, J. S., 15.
Jones, J. W., 60.
Jones, K. D., 9.
Jones, L. L., 18.
Jones, L. R., 65.
Jones, M. D., 27.
Jones, M. E., 65.
Jones, O. B., 48.
Jones, O. Lloyd, 21.
Jones, R. E., 11.
Jones, R. S., 38.
Jones, R. W., 25.
Jones, S., 65.
Jones, S. C., 18.
Jones, T. H., 26.
Jordan, E. L., 26.
Jordan, G. F., 28.
Jordan, P. S., 33.
Jordan, W. H., 3, 45.
Joseph, W. E., 38.
Judkins, H. F., 11.
Justin, M. M., 31.
Juve, O. A., 65.
- Kadderly, W. L., 51.
Kalbus M., 51.
Kalkus, J. W., 62.
Kammlade, W. G., 17.
Karper, R. E., 58.
Karraker, P. E., 25.
Kauffman, T., 48.
Kaupp, B. F., 46.
Kays, D. J., 48.
Kazmeier, F. W., 58.
Kedzie, F. S., 30.
Kedzie, R. H., 21.
Keeler, R. F., 45.
Keene, E. S., 47.
Keffer, C. A., 57.
Kehrl, F. W., 51.
Keil, J. B., 49.
Kelm, F. D., 39.
Keith, M. H., 17.
Kelthley, J. R., 47.
Keitt, G. W., 65.
Keitt, T. E., 55.
Kellar, V. M., 28.
Kellems, T. O., 21.
Keller, E. R., 36.
Kellerman, K. F., 3.
Kelley, J. B., 21.
Kelley, W. P., 9.
Kellogg, R., 31.
Kelly, A., 15.

- Kelly, J. P., 53.
 Kelly, M., 21.
 Kemp, J. G., 50.
 Kemper, T. L., 35.
 Kempster, H. L., 36.
 Kendall, J. C., 40.
 Kendrick, W. H., 63.
 Kenerson, A. S., 43.
 Kenety, W. H., 33.
 Kennard, D. C., 18.
 Kennard, L. T., 29.
 Kennedy, C., 33.
 Kennedy, C. H., 43.
 Kennedy, L. E., 23.
 Kennedy, M. R., 62.
 Kennedy, P. B., 9.
 Kenney, F. C., 29.
 Kent, H., 65.
 Kent, H. L., 23.
 Keown, M. E., 5.
 Kercher, O., 25.
 Kerlin, I. B., 35.
 Kern, F. D., 53.
 Kern, O. J., 9.
 Kern, V. H., 7.
 Kernkamp, H. C., 33.
 Kerr, A. P., 26.
 Kerr, W. H., 10.
 Kerr, W. J., 51.
 Keyser, C. N., 13.
 Kezer, A., 10.
 Klah, T. H., 29.
 Kidder, A. F., 26.
 Kidder, I. A., 51.
 Kiene, F. A., jr., 23.
 Kiesselbach, T. A., 39.
 Kigin, L. C., 18.
 Kildee, H. H., 33.
 Kilgore, B. W., 3, 45.
 Kilham, A. D., 29.
 Killgore, N. M., 10.
 Killough, D. T., 58.
 Kilpatrick, M. C., 48.
 Kime, P. H., 46.
 Kimlel, J. E., jr., 58.
 Kindig, B. F., 31.
 King, A. C., 43.
 King, C. M., 21.
 King, E. R., 43.
 King, H. E., 6.
 King, H. H., 23.
 King, H. L., 27.
 King, H. T., 12.
 Kinghorn, P., 62.
 Kingman, H. E., 10.
 Kinney, E. J., 25.
 Kinsman, C. D., 18.
 Kirk, F. W., 23.
 Kirk, R. E., 21.
 Kirkpatrick, E. L., 43.
 Kirkpatrick, M. W., 23.
 Kirkpatrick, W. F., 11.
 Kirkwood, W. P., 33.
 Kiser, R. W., 23.
 Kleinheinz, F., 65.
 Kleinschmidt, L. S., 53.
 KleinSmid, R. B., von, 7.
 Knandel, H. C., 53.
 Knapp, B., 3.
 Knapp, G. S., 23.
 Knapp, H., 21.
 Knight, C. S., 39.
 Knight, E. H., 66.
 Knight, H. G., 50.
 Knight, H. H., 43.
 Knight, L. I., 63.
 Knoll, F. P., 53.
 Knowles, N. S., 21.
 Knowles, V. W., 7.
 Knowlton, H., 40.
 Knowlton, H. E., 43.
 Knox, J. S., 7.
 Knudson, L., 43.
 Koger, E., 42.
 Koll, M. E., 51.
 Kolshorn, H., 66.
 Koonce, L. F., 46.
 Kopeloff, N., 26.
 Kostalek, J. A., 15.
 Kostir, W. J., 48.
 Kraft, W. W., 58.
 Krak, J. H. B., 63.
 Krakover, C. J., 47.
 Kramer, W. H., 50.
 Kraus, E. J., 51.
 Krauss, F. G., 14.
 Krausz, H. B., 58.
 Krecker, F. H., 48.
 Krout, W. S., 29.
 Krueck, W. B., 18.
 Krueger, J., 65.
 Krum, W. G., 43.
 Kruse, P. J., 43.
 Krusekopf, H. H., 36.
 Kulp, W. L., 45.
 Kunerth, W., 21.
 Kunst, F. B., 63.
 Kuska, J. B., 23.
 Kutsunai, Y., 15.
 Kuzirian, S. B., 21.
 Kyle, E. J., 58.
 La Bach, J. O., 25.
 Lacey, E. V., 39.
 Lacey, L., 10.
 Lackie, H. M., 21.
 Ladd, E. F., 47.
 Ladd, J. E., 54.
 Lafrenz, F. H., 15.
 LaGrange, W. F., 21.
 Laird, K. B., 40.
 La Master, J. P., 35.
 Lamb, A. R., 21.
 Lambert, D. J., 54.
 Lambert, F. A., 48.
 Lamkey, E. M. R., 12.
 Lamson, G. H., jr., 11.
 Lamson, R. A., 18.
 Lancaster, C. A., 62.
 Lancaster, D. S., 61.
 Landacre, F. L., 48.
 Landon, L. E., 31.
 Lane, D. J., 33.
 Lang, E., 33.
 Langohr, D. M., 62.
 Langworthy, A. E., 23.
 Lanham, W. B., 58.
 Lanier, A., 56.
 Lantis, L. O., 48.
 Lantz, C. W., 39.
 Lantz, H. L., 21.
 Lapham, P., 12.
 Lapp, W. H., 21.
 Larrimer, W. H., 18.
 Larsen, C., 56.
 Larson, A. H., 33.
 Larson, J. E., 51.
 Larson, M. S., 33.
 Larson, R. A., 56.
 Lassetter, W. C., 7.
 Lathrop, F. H., 51.
 Latshaw, W. L., 23.
 Latta, W. C., 18.
 Lattimer, R. C., 6.
 Laude, H. H., 58.
 Laudemann, W. A., 31.
 Lauman, G. N., 43.
 Lauterbach, E. G., 17.
 Lawrence, E. A., 56.
 Lawrence, W. E., 51.
 Lawrence, W. H., 36.
 Laws, A. G., 35.
 Lawson, D. L., 26.
 Laycock, W. E., 31.
 Layton, R. F., 41.
 Lea, E. J., 9.
 Leach, J. G., 33.
 Learn, C. D., 50.
 Leaton, L. L., 56.
 Lee, E., 64.
 Lee, J. G., 26.
 Lee, O. S., 25.
 Leete, B. A., 62.
 Lefevre, G., 36.
 Legge, W. R., 63.
 Leggett, H. A. D., 61.
 Lehenbauer, P. A., 17.
 Lehman, S. G., 46.
 Lehmann, E. W., 36.
 Lehnert, E. H., 66.
 Leiby, C. I., 15.
 Leiby, R. W., 46.
 Leidigh, A. H., 58.
 Leighton, V. L., 54.
 Leighty, W. R., 17.
 Leiper, T. E., 10.
 Leister, C. W., 43.
 Leith, B. D., 65.
 Leith, T. S., 21.
 Leland, E. W., 43.
 Lentz, J. B., 29.
 Leonard, L., 8.
 Leonard, M. D., 53.
 Leonard, O. F., 41.
 Leonian, L. H., 55.
 LeRoy, V. E., 31.
 Levin, E., 31.
 Levine, M., 21.
 Levine, M. N., 23.
 Lewers, R., 39.
 Lewis, A., 8.

- Lewis, A. C., 61.
 Lewis, C. I., 51.
 Lewis, E. M., 29.
 Lewis, F. C., 18.
 Lewis, H. G., 55.
 Lewis, H. R., 41.
 Lewis, I. P., 50.
 Lewis, J. V., 41.
 Lewis, L. L., 50.
 Lewis, M. C., 53.
 Lewis, S. L., 51.
 Lhamon, C. L., 36.
 Libbey, H. F., 36.
 Lienhardt, H. F., 23.
 Linch, L. B., 39.
 Lindemann, E. C., 31.
 Linder, G., 48.
 Lindley, E. H., 15.
 Lindsey, J. B., 29.
 Linfield, F. B., 3, 37.
 Linford, J. H., 60.
 Lingle, L. F., 51.
 Link, G. K. K., 39.
 Linklater, W. A., 63.
 Lipman, C. B., 9.
 Lipman, J. G., 3, 40, 41.
 Lipp, C. C., 56.
 Lippincott, W. A., 23.
 Lipscomb, G. F., 55.
 Lisse, M. W., 53.
 List, G. M., 10.
 Little, H. B., 40.
 Littlehale, A., 19.
 Livermore, K. C., 43.
 Livesay, E. A., 36.
 Livingston, A. S., 40.
 Livingston, J. A., 46.
 Llewellyn, W. M., 5.
 Lloyd, E. R., 34.
 Lloyd, J. W., 17.
 Lloyd, O. G., 21.
 Lloyd, W. E., 9.
 Lloyd-Jones, O., 21.
 Lobdell, R. N., 35.
 Lockett, S., 39.
 Lockwood, W. P. B., 29.
 Loeffel, W. J., 39.
 Lommel, W. E., 18.
 Lommen, G., 33.
 Long, D. D., 13.
 Long, E., 40.
 Long, W. W., 55.
 Longfellow, E. S., 36.
 Longyear, B. O., 10.
 Loomis, A. M., 39.
 Loomis, H., 56.
 López, F. A., 54.
 Lord, C. B., 33.
 Loree, R. E., 31.
 Lory, C. A., 3, 10.
 Lott, E. H., 43.
 Lott, W. C., 21.
 Loudenslager, C. B., 43.
 Love, H. H., 43.
 Lovejoy, S. C., 53.
 Loveland, G. A., 39.
 Lovett, A. E., 10.
 Lovett, A. L., 51.
 Lowe, C. D., 57.
 Lowry, M. W., 13.
 Lowry, R. B., 57.
 Loy, S. K., 66.
 Loyd, H. S., 6.
 Lucas, P. S., 51.
 Luce, H. C., 15.
 Lueder, C. A., 63.
 Lumsden, D., 43.
 Lund, Y., 60.
 Lunk, H., 65.
 Lusk, W. F., 43.
 Lute, A. M., 18.
 Luther, E. L., 65.
 Lutman, B. F., 61.
 Luttrell, E., 7.
 Lutts, F. M., 50.
 Lyles, T. J., 56.
 Lyman, J. F., 48.
 Lyman, L. T., 15.
 Lyman, R. P., 31.
 Lynde, H. M., 46.
 Lyon, H. L., 15.
 Lyon, T. L., 43.
 Lytle, A. C., 31.
 McAdams, L. H., 57.
 McAdory, I. S., 5.
 McAllep, W. R., 15.
 McAmis, J. C., 57.
 McArthur, C. L., 51.
 McBee, J. S., 35.
 McBride, C. G., 53.
 McBride, J. N., 31.
 McBryde, J. M., 61.
 McBurney, R., 51.
 McCall, A. G., 28.
 McCall, F. E., 56.
 McCall, M. A., 63.
 McCall, T. M., 33.
 McCall, W. T., 15.
 McCampbell, C. W., 23.
 McCandlish, A. C., 21.
 McCartney, H. E., 18.
 McCarty, D. M., 46.
 McCarty, J. A., 18.
 McCheyne, G. M., 60.
 McChord, R. C., 38.
 McClelland, C. K., 14.
 McClelland, T. B., 54.
 McClintock, J. E., 48.
 McCluer, D., 46.
 McClure, G. M., 48.
 McClurg, N., 23.
 McColloch, J. W., 23.
 McConnell, H. S., 28.
 McConnell, O. J., 46.
 McCool, M. M., 31.
 McCormick, F. A., 11.
 McCreary, O., 45.
 McCue, C. A., 12.
 McCuen, G. W., 48.
 McCulloch, T. B., 33.
 McCurdy, J. C., 43.
 McDaniel, E. I., 31.
 McDaniel, J. S., 36.
 McDonald, B. A., 11.
 McDonald, C., 6.
 McDonald, C. W., 53.
 McDonald, E. M., 36.
 McDonald, M., 21.
 McDonald, M. C., 47.
 McDonald, M. M., 23.
 McDonel, K. H., 31.
 McDonnell, H. B., 28.
 McDowell, C. H., 58.
 McDowell, M., 33.
 McDowell, M. S., 52.
 McElroy, C. H., 50.
 McFarland, F. T., 25.
 McFarlin, J. W., 25.
 McFeely, A., 33.
 McGahan, A. E., 33.
 McGee, E. L., 59.
 McGhee, E., 57.
 McGinnis, E., 15.
 McGinnis, N. M., 58.
 McGinty, R. A., 10.
 McGuire, A. J., 33.
 McGuire, L. M., 48.
 McHargue, J. S., 25.
 McHatton, T. H., 13.
 McHenry, R. F., 28.
 McHugh, J. K., 26.
 McIlvaine, T. C., 63.
 McIlwain, D. W., 35.
 McInerney, T. J., 43.
 McIntire, W. H., 57.
 McIntosh, C. J., 51.
 McIntosh, C. N., 62.
 McIntyre, E. R., 65.
 McKay, A. B., 35.
 McKay, J. F., 35.
 McKay, L. J., 35.
 McKay, M. B., 51.
 McKee, C., 21.
 McKee, J. C., 35.
 McKellip, I., 49.
 McKerron, W. A., 33.
 McKimmon, J. S., 46.
 McKinney, A. E., 43.
 McKnight, G. G., 33.
 McKnight, H. L., 59.
 McLaughlin, F. A., 29.
 McLean, H. C., 41.
 McLendon, H. S., 12.
 McLeod, J. H., 7.
 McLurkin, C. P., 8.
 McMillan, S. A., 59.
 McMiller, P. R., 33.
 McMurtray, H. D., 35.
 McNair, A. D., 7.
 McNall, P. E., 23.
 McNeal, W. B., 21.
 McNess, G. T., 59.
 McNutt, J. C., 29.
 McNutt, S. H., 21.
 McPheeters, M. R., 50.
 McPheeters, W. H., 59.
 McPherson, W., 49.
 McQuarrie, C. K., 12.
 McVean, J. D., 66.
 McVeety, E., 47.

- McVey, F. L., 25.
 Maberry, Mrs. F. N., 27.
 MacCaughy, V., 14.
 MacComber, O. B., 33.
 MacDaniels, L. H., 43.
 MacDonald, B. I., 41.
 MacDonald, G. B., 21.
 MacDonald, M. B., 53.
 MacDonald, P., 53.
 Mace, W. A., 54.
 Macfarlane, J., 40.
 MacInnes, F. J., 33.
 Mack, M. E., 39.
 MacKay, C. J., 21.
 Mackintosh, R. S., 33.
 Macklin, T., 23.
 Macpherson, H., 51.
 Maddux, H. T., 13.
 Maddux, W. W., 6.
 Madson, B. A., 9.
 Magee, W. T., 59.
 Mains, E. B., 19.
 Mair, W. M., 56.
 Mairs, T. I., 53.
 Major, H. F., 36.
 Malone, J. S., 50.
 Mandenberg, E. C., 31.
 Maneval, W. E., 36.
 Maney, T. J., 21.
 Mangels, C. E., 36.
 Mann, A. R., 42.
 Manning, H., 65.
 Manns, T. F., 12.
 Manter, J. A., 11.
 Marden, J. W., 36.
 Margarida, F., 54.
 Maris, P. V., 51.
 Mark, C. G., 49.
 Markey, W. E., 65.
 Markley, H., 50.
 Markley, J. P., 50.
 Marlatt, A. L., 65.
 Marlatt, C. L., 3.
 Marshall, C. E., 29.
 Marshall, J. D., 10.
 Marshall, R. E., 61.
 Marsteller, R. P., 59.
 Martin, G. L., 38.
 Martin, H. M. (Ala.), 5.
 Martin, H. M. (Wyo.), 66.
 Martin, J., 51.
 Martin, J. C., 9.
 Martin, J. H., 25.
 Martin, J. N., 21.
 Martin, L., 29.
 Martin, M., 5.
 Martin, T. T., 12.
 Martin, W. H., 41.
 Martin, W. P., 26.
 Mason, A. F., 53.
 Mason, C. J., 11.
 Mason, C. R., 19.
 Mason, D. T., 9.
 Mason, P. W., 19.
 Mason, R. H., 46.
 Mason, S. L., 19.
 Massey, A. B., 5.
 Massey, C. M., 57.
 Massey, L. M., 43.
 Mather, S., 23.
 Matheson, R., 43.
 Mathew, E. B., 7.
 Mathews, C. W., 25.
 Mathews, H. B., 56.
 Mathewson, E. H., 46.
 Matienzo, B., 54.
 Matthews, C. D., 46.
 Matthews, E., 14.
 Matthews, M. L., 19.
 Mattill, H. A., 9.
 Mattson, D. F., 65.
 Matz, J., 12.
 Maugban, M. O., 63.
 Maxson, R. N., 25.
 May, D. W., 54.
 Mayland, E., 47.
 Maynard, L. A., 44.
 Mayne, D. D., 33.
 Mayo, H. H., 57.
 Mays, M. L., 56.
 Meacham, F. T., 46.
 Mead, E., 9.
 Meade, D., 44.
 Mebane, A. L., 46.
 Meck, C. L., 28.
 Meehan, T. A., 56.
 Meek, E. B., 53.
 Meeks, J. R., 42.
 Mehaffey, E. E., 40.
 Melander, A. L., 63.
 Melchers, L. E., 23.
 Melhus, I. E., 21.
 Meloche, G. E., 55.
 Menig, O., 63.
 Mensching, J. E., 45.
 Menville, R. L., 26.
 Merkle, F. G., 29.
 Merkle, G. E., 55.
 Merrill, D. E., 42.
 Merrill, J. H., 23.
 Merrill, L. A., 60.
 Merrell, L. H., 27.
 Merrill, L. S., 27.
 Merrill, M. C., 60.
 Merrow, H. L., 55.
 Mertz, W. M., 9.
 Mervine, E. M., 21.
 Meserve, C. A., 7.
 Meske, A. E., 41.
 Meskimmons, M., 39.
 Metcalf, A. C., 41.
 Metcalf, C. L., 49.
 Metcalf, H. E., 47.
 Metcalf, W., 9.
 Metcalf, Z. P., 46.
 Metzger, J. E., 28.
 Meyer, A. J., 35.
 Michaels, R. E., 50.
 Michel, C. W., 56.
 Mickel, C. E., 39.
 Milam, A. B., 51.
 Milam, L., 23.
 Millar, C. E., 31.
 Millen, F. E., 21.
 Miller, A. McQ., 25.
 Miller, C., 21.
 Miller, C. B., 21.
 Miller, C. F., 46.
 Miller, E., 21.
 Miller, E. C., 23.
 Miller, E. J., 31.
 Miller, F. G., 15.
 Miller, G. E., 47.
 Miller, H. G., 52.
 Miller, J. W., 53.
 Miller, K. S., 21.
 Miller, M. (Minn.), 33.
 Miller, M. (Wis.), 65.
 Miller, M. F., 36.
 Miller, M. R., 9.
 Miller, P. C., 42.
 Miller, P. E., 33.
 Miller, P. G., 54.
 Miller, R. D., 21.
 Miller, R. F., 9.
 Miller, R. N., 63.
 Miller, S. H., 35.
 Miller, S. P., 56.
 Mills, W. O., 19.
 Mills, Z. E., 39.
 Milton, R. H., 57.
 Milward, J. G., 65.
 Minch, H. E., 41.
 Miner, J. R., 27.
 Minns, L. A., 44.
 Misner, E. G., 44.
 Mitchell, C. B., 35.
 Mitchell, C. O., 57.
 Mitchell, H. G., 27.
 Mitchell, H. H., 17.
 Mitchell, J. H., 55.
 Mitchell, J. R., 25.
 Mitchell, R. P., 27.
 Mitchell, R. V., 12.
 Mitchell, S. C., 12.
 Mobley, C., 27.
 Moen, J., 60.
 Moffitt, E. L., 53.
 Mohler, J. R., 3.
 Moir, J. T., jr., 15.
 Monahan, A. C., 3.
 Monahan, W. C., 27.
 Monobon, P. W., 27.
 Monroe, F., 23.
 Monsch, H., 21.
 Montague, E. J., 23.
 Montague, F. O., 5.
 Montgomery, C. W., 50.
 Montgomery, E. G., 44.
 Montgomery, J. S., 33.
 Montgomery, J. T., 23.
 Montgomery, L. M., 49.
 Montgomery, S. A., 35.
 Montillon, E. D., 44.
 Moody, J. G., 9.
 Moody, H. W., 35.
 Mooers, C. A., 57.
 Moore, A. R., 41.
 Moore, C., 52.
 Moore, H. D., 61.
 Moore, J. G., 65.

- Moore, J. S., 35.
 Moore, P., 15.
 Moore, R. A., 65.
 Moore, V. P., 57.
 Moore, W., 33.
 Moorhead, M. B., 33.
 Moorhouse, H. W., 50.
 Mooring, D. C., 50.
 Moran, C., 40.
 Morbeck, G. C., 21.
 Mordoff, R. A., 44.
 Moreland, C. C., 27.
 Moreland, C. F., 27.
 Morgan, D. N., 9.
 Morgan, E. L., 29.
 Morgan, G., 25.
 Morgan, H. A., 57.
 Morgan, J. F., 31.
 Morgan, J. O., 59.
 Morgan, L. E., 50.
 Morgan, R. J., 44.
 Morison, C. B., 11.
 Morley, L. W., 36.
 Morr, E. C., 50.
 Morrey, C. B., 49.
 Morrill, A. W., 7.
 Morrill, W. J., 10.
 Morris, C. K., 31.
 Morris, E., 38.
 Morris, H., 27.
 Morris, H. E., 38.
 Morris, O. M., 63.
 Morris, V. L., 27.
 Morrison, F. B., 65.
 Morrison, G. E., 56.
 Morrison, J. D., 56.
 Morrow, C. A., 33.
 Morrow, H. E., 7.
 Morse, A. P., 33.
 Morse, F. W., 30.
 Morse, W. J., 27.
 Mortensen, M., 21.
 Mortimer, G. B., 65.
 Morton, A., 56.
 Morton, G. E., 10.
 Moseley, R. S., 44.
 Moses, J. E., 46.
 Moses, W., 44.
 Mosier, J. G., 17.
 Mosier, W. H., 49.
 Moss, A. E., 11.
 Moss, E. G., 46.
 Mostrom, H. A., 40.
 Mote, D. C., 50.
 Moton, R. R., 6.
 Moulton, C. R., 36, 53.
 Mowry, J. M., 33.
 Moyer, O. J., 50.
 Muenschner, W. L. C., 44.
 Muir, F., 15.
 Mulford, W., 9.
 Muller, R. T., 62.
 Mulvania, M., 57.
 Mumford, E., 31.
 Mumford, F. B., 3, 35.
 Mumford, H. W., 17.
 Munger, H. B., 21.
 Munn, M. T., 45.
 Murdock, H. E., 38.
 Murphree, A. A., 12.
 Murphy, H. S., 21.
 Murphy, R. M., 57.
 Murphy, W., 31.
 Murray, C., 21.
 Murray, N. A., 8.
 Murray, R. F., 65.
 Murray, T. J., 63.
 Musbach, F. L., 65.
 Mussehl, F. E., 39.
 Musselman, H. H., 31.
 Musselman, S. F., 25.
 Musser, K. B., 11.
 Mutchler, F., 25.
 Muttkowski, R. A., 24.
 Myers, C. E., 53.
 Myers, C. H., 44.
 Myers, W. I., 44.
 Nabours, R. K., 24.
 Nance, J. E., 50.
 Nanz, R. S., 44.
 Naylor, N. M., 21.
 Naylor, P. B., 36.
 Neal, R. T., 62.
 Neale, A. S., 24.
 Neale, L. F., 59.
 Needham, J. G., 44.
 Neff, C. E., 12.
 Neidig, R. E., 15.
 Neller, J. R., 41.
 Nelson, A., 66.
 Nelson, C. I., 47.
 Nelson, J. B., 38.
 Nelson, J. W., 9.
 Nelson, M., 7.
 Nelson, N. L., 21.
 Nelson, O. M., 52.
 Nelson, P., 14.
 Nelson, S. B., 63.
 Nelson, W. L., 36.
 Nelson, W. S., 35.
 Nesom, G. H., 33.
 Ness, H., 59.
 Netherton, T. M., 10.
 Nevens, W. B., 39.
 Newburn, N., 17.
 Newcomb, M. J., 53.
 Newhall, H. W. F., 31.
 Newlander, C. E., 55.
 Newman, C. C., 55.
 Newman, C. E., 5.
 Newman, C. L., 46.
 Newman, H. G., 36.
 Newman, P. J., 24.
 Newmann, E. H., 36.
 Newsom, I. E., 10.
 Newton, H. D., 11.
 Newton, J. O., 47.
 Nicholls, W. D., 25.
 Nichols, B., 60.
 Nichols, H. E., 21.
 Nichols, M. L., 12.
 Nicholson, J. F., 7.
 Nicholson, J. W., 31.
 Niles, H. E., 33.
 Nimitz, H. J., 19.
 Nissley, C. H., 41.
 Niswonger, H. R., 25.
 Nixon, E. L., 53.
 Noble, C. V., 44.
 Noble, E. C., 39.
 Nobles, C. G., 31.
 Nolan, A. W., 17.
 Noland, D. R., jr., 46.
 Noll, C. F., 53.
 Norcross, C. A., 39.
 Nordby, J. E., 15.
 Norris, H. N., 30.
 Norris, R. S., 15.
 North, K. S., 47.
 Northrop, L. Z., 31.
 Norton, J. B., 61.
 Norton, J. B. S., 28.
 Norton, J. H., 9.
 Norton, L. J., 44.
 Norwood, F. J., 35.
 Nothnagel, M., 12.
 Nottingham, Mrs. M. S., &
 Nourse, E. G., 7.
 Novitski, J., 30.
 Noyes, H. A., 19.
 Nuckols, I. F., 36.
 Nutter, J. W., 25.
 Nuzum, C. C., 63.
 Nye, C., 44.
 O'Brien, H. R., 21.
 O'Brien, R., 21.
 Odell, F. I., 19.
 Odell, F. L., 21.
 Odland, T. E., 33.
 Odum, H. W., 13.
 Ogaard, A. J., 47.
 Ogilvie, M., 38.
 O'Kane, W. C., 40.
 Okey, M., 49.
 Oliver, A. G., 46.
 Oliver, M. B., 64.
 Olmstead, R. E., 33.
 Olney, A. J., 25.
 Olney, C. B., 17.
 Olsen, A. M., 21.
 Olsen, J. C., 59.
 Olson, G. A., 63.
 Olson, M. E., 21.
 Olson, P. J., 33.
 O'Neal, A. T., 26.
 O'Neill, A. T., 28.
 Ong, E. R., de, 8.
 Oosterhuis, A. C., 65.
 Opperman, C. L., 28.
 Ord, E., 39.
 O'Roke, E. C., 66.
 Orton, C. R., 53.
 Osborn, G. A., 41.
 Osborn, H., 49.
 Osborn, L. W., 7.
 Osborn, M. G., 27.
 Osborne, T. B., 11.
 Osburn, R. C., 49.
 Oskamp, J., 19.

- Osmun, A. V., 30.
 Osterholm, L., 38.
 Ostrander, J. E., 30.
 Ostrander, W. A., 56.
 Oswald, W. L., 33.
 Otis, D. H., 65.
 Ousley, C., 58.
 Overholser, E. L., 44.
 Overholt, V., 49.
 Overholts, L. O., 53.
 Overman, O. R., 17.
 Owen, E. J., 41.
 Owen, F. D., 46.
 Owens, C. C., 6.
 Owens, C. E., 52.

 Packard, W. E., 9.
 Paddock, F. B., 59.
 Paddock, W., 49.
 Padgett, T. D., 55.
 Page, C. C., 25.
 Paige, E. O., 13.
 Paige, J. B., 30.
 Pailthorp, R. R., 12.
 Paine, J. H., 52.
 Painter, H. R., 50.
 Palmer, C. C., 12.
 Palmer, G. A., 24.
 Palmer, G. M., 24.
 Palmer, L. S., 36.
 Palmer, M. A., 10.
 Palmer, S., 33.
 Palmer, T. A., 55.
 Palmer, W. C., 47.
 Palmer, W. H., 49.
 Pammel, L. H., 21.
 Park, J. B., 49, 50.
 Park, O. W., 21.
 Parke, L. S., 7.
 Parker, E., 31.
 Parker, F. L. D., 12.
 Parker, G. W., 44.
 Parker, H. M., 35.
 Parker, J. B., 8.
 Parker, J. H., 24.
 Parker, J. R., 38.
 Parker, S., 27.
 Parker, S. R., 30.
 Parkinson, H. G., 53.
 Parks, A., 61.
 Parks, C. M., 24.
 Parks, P. C., 6.
 Parks, T. H., 24.
 Parrish, G. R., 61.
 Parrott, P. J., 45.
 Parshall, R. L., 10.
 Parsons, J. T., 50.
 Parsons, M. E., 17.
 Parsons, T. S., 66.
 Partch, L., 19.
 Patch, E. M., 27.
 Patch, R. H., 64.
 Pate, H. O., 35.
 Pate, R. H., 35.
 Pate, W. F., 46.
 Paterson, A. G., 63.
 Paterson, A. M., 24.

 Paterson, T. G., 33.
 Patt, E., 19.
 Patten, A. J., 31.
 Patterson, C. D., 33.
 Patterson, G., 12.
 Patterson, H. J., 28.
 Patterson, T. M., 35.
 Patton, C. A., 50.
 Patton, O. V., 63.
 Patty, R. L., 56.
 Paxman, J. W., 60.
 Payne, L. F., 30.
 Peables, B. L., 30.
 Peacock, W. M., 30.
 Peairs, L. M., 64.
 Pearce, S. D., 59.
 Pearce, S. J., 24.
 Pearce, W. T., 47.
 Pearse, R. J., 21.
 Pearson, F. A., 17.
 Pearson, M. H., 5.
 Pearson, R. A., 3, 19.
 Peck, A. L., 52.
 Peck, F. W., 34.
 Peck, H. E., 55.
 Peden, F. T., 46.
 Peer, H., 52.
 Pegg, E. C., 36.
 Peitersen, A. K., 61.
 Peltier, G. L., 5.
 Pelton, W. C., 11.
 Pember, F. R., 55.
 Pence, M. L., 25.
 Pence, M. O., 12.
 Pennock, O., 10.
 Penny, C. L., 12.
 Peppard, L. L., 31.
 Percival, O. B., 17.
 Perin, S. W., 39.
 Perisho, E. C., 3, 56.
 Perkins, A. E. (Miss.), 35.
 Perkins, A. E. (Ohio), 50.
 Perkins, E. H., 55.
 Perkins, G. H., 60.
 Perkins, H. F., 61.
 Perkins, S. O., 46.
 Perkins, W. R., 26.
 Perley, G. A., 40.
 Perry, E. H., 25.
 Perry, J. C., 24.
 Perry, L., 17.
 Perry, M., 25.
 Person, F. G., 10.
 Person, M. M., 31.
 Peteet, W., 59.
 Peter, A. M., 25.
 Peters, C. A., 30.
 Peters, E. M., 59.
 Peters, W. H., 47.
 Petersen, N. F., 39.
 Petersen, P. T., 9.
 Peterson, A., 41.
 Peterson, E. G., 59.
 Peterson, E. J., 47.
 Peterson, J. C., 24.
 Peterson, P. P., 15.
 Peterson, R. W., 31.

 Peterson, V., 55.
 Peterson, W., 60.
 Peterson, W. E., 24.
 Peterson, W. H., 65.
 Petry, E. J., 19.
 Pettee, C. A., 40.
 Pettit, R. H., 31.
 Pettit, S., 36.
 Pew, W. H., 21.
 Phelan, J., 30.
 Phelps, E. L., 34.
 Phillips, A. G., 19.
 Phillips, E. H., 59.
 Phillips, H. D., 44.
 Phillips, J. V., 13.
 Phillips, T. D., 49.
 Phillips, T. G., 49.
 Phinney, G. H., 24.
 Phipps, G. R., 44.
 Pickel, F. W., 8.
 Pickel, J. M., 46.
 Pickett, B. S., 17.
 Pickett, C. J., 6.
 Pickett, F. L., 63.
 Pieper, J., 17.
 Pierce, I. H., 63.
 Pierson, C. J., 28.
 Piester, E. A., 21.
 Pieters, C., 27.
 Pillsbury, J. P., 46.
 Pinckney, R. M., 38.
 Pinckney, S. M., 56.
 Pinnell, W. R., 25.
 Pipal, F. J., 19.
 Pittman, D. W., 60.
 Pittman, M. S., 53.
 Pitz, W., 65.
 Platt, C. E., 52.
 Platts, C. N., 27.
 Plum, H. M., 39.
 Plumb, C. S., 49.
 Plummer, J. K., 46.
 Poats, T. G., 55.
 Pond, G. A., 34.
 Pontius, B. E., 30.
 Pontius, R. L., 25.
 Pool, R. J., 39.
 Poole, R. F., 41.
 Pope, W. M., 62.
 Pope, W. T., 9.
 Porter, C. S., 25.
 Porter, C. W., 60.
 Porter, J. T., 57.
 Porter, W. R., 47.
 Potter, A. A., 3.
 Potter, C. E., 38.
 Potter, E. L., 52.
 Potter, G. F., 65.
 Potter, G. M., 24.
 Potter, H. B., 57.
 Potter, P. B., 49.
 Potter, R. S., 21.
 Potter, S. E., 61.
 Potter, W. R. R., 15.
 Potts, A. T., 59.
 Pou, R. L., 59.
 Powell, P. P., 5.

- Powell, S. V., 35.
 Powers, W. H., 56.
 Powers, W. L., 52.
 Prats, E. R., 54.
 Pratt, C. D., 62.
 Pratt, F. R., 41.
 Pratt, H. A., 24.
 Pratt, H. E., 6.
 Pratt, J. S. B., jr., 15.
 Pratt, M. B., 9.
 Prentice, B., 19.
 Prentiss, S., 52.
 Pressley, E. H., 55.
 Preston, C. F., 53.
 Preston, R. E., 24.
 Price, E. R., 61.
 Price, H. B., 11.
 Price, H. L., 61.
 Price, J. C. C., 5.
 Price, J. D., 14.
 Price, L. L., 24.
 Price, R. B., 36.
 Price, W. A., 19.
 Prichard, E. W., 15.
 Prillerman, B., 64.
 Prince, F. S., 40.
 Propps, D. H., 39.
 Proulx, E. G., 19.
 Prucha, M. J., 17.
 Purlow, H. L., 31.
 Pugsley, C. W., 3, 38.
 Purnell, L., 25.
 Purwin, P. F. K., 21.
 Puryear, C., 59.
 Putnam, J. J., 15.
 Putney, F. S., 53.
- Quaife, E. L., 21.
 Quayle, H. J., 9.
 Quear, C. L., 24.
 Quinerly, J. P., 5.
 Quinn, E. J., 38.
 Quintero, J., 42.
- Raburn, G. E., 24.
 Rader, F. E., 6.
 Rae, R. M., 21.
 Ragsdale, A. C., 38.
 Ragsdale, E., 13.
 Raiford, L. C., 50.
 Ralston, G. S., 61.
 Rambo, P. R., 59.
 Ramsey, G. B., 27.
 Ramsower, H. C., 49.
 Ranck, E. M., 35.
 Randlett, G. W., 47.
 Rane, F. W., 30.
 Rankin, F. H., 17.
 Rankin, J. O., 21.
 Rankin, W. H., 44.
 Ranney, E. S., 53.
 Ransford, A., 31.
 Ransom, J. H., 19.
 Rasmussen, F., 53.
 Rast, F. M., jr., 12.
 Rast, L. E., 13.
 Rather, J. B., 8.
- Ravenhill, A., 60.
 Ray, A. B., 59.
 Ray, G. S., 15.
 Rayner, O. S., 10.
 Reade, J. M., 13.
 Reardon, J., 21.
 Reavis, G. W., 36.
 Rebok, E., 21.
 Recknagel, A. B., 44.
 Records, E., 39.
 Reddick, D., 44.
 Reddy, C. S., 47.
 Redhead, J. A., 27.
 Reed, A. J., 46.
 Reed, G. M., 36.
 Reed, H. J., 19.
 Reed, H. S., 9.
 Reed, K. W., 24.
 Reed, M. D., 35.
 Reed, O. E., 24.
 Reed, R. C., 28.
 Reed, T. C., 46.
 Reeder, G., 36.
 Rees, R. W., 44.
 Reese, H. M., 36.
 Reese, N. M., 13.
 Reeves, M. B., 35.
 Regan, W. M., 41.
 Regan, W. S., 30.
 Regt, A. C. de, 40.
 Reid, C. B., 46.
 Reimer, F. C., 52.
 Reiner, F., 40.
 Reinhard, H. J., 59.
 Reinsburg, C. G., 28.
 Renshaw, R. R., 21.
 Ressler, I. L., 21.
 Rettger, L. F., 11.
 Reynolds, A. W., 59.
 Reynolds, E. A., 25.
 Reynolds, E. S., 47.
 Reynolds, J. M., 15.
 Reynolds, M. H., 34.
 Rhea, W. A., jr., 64.
 Rhode, C. S., 17.
 Rhodes, H. C., 25.
 Rhodes, L., 59.
 Rhodes, L. L., 21.
 Rice, C. D., 21.
 Rice, F. E., 44.
 Rice, J. B., 17.
 Rice, J. E., 44.
 Rice, Mrs. L. S., 21.
 Rice, V. A., 30.
 Rich, F. A., 61.
 Richards, B. L., 60.
 Richards, D. E., 52.
 Richards, L., 24.
 Richardson, A. G. G., 49.
 Richardson, A. W., 40.
 Richardson, E. H., 21.
 Richardson, E. S., 27.
 Richardson, L., 60.
 Richardson, L. A., 60.
 Richardson, M. B., 21.
 Richey, H. W., 64.
 Richey, P. S., 19.
- Richie, G., 42.
 Richmond, T. E., 50.
 Ricker, D. A., 19.
 Rickey, H. W., 28.
 Ricks, J. R., 35.
 Ricks, N. D., 6.
 Riddell, F. T., 31.
 Riddick, W. C., 45.
 Ridgell, R. H., 8.
 Ridgway, J. A., 41.
 Ridgway, J. W., 59.
 Rietz, H. L., 17.
 Riffenburg, H. B., 59.
 Riggs, W. M., 3, 55.
 Rigney, J. W., 42.
 Riley, B. C., 8.
 Riley, H. W., 44.
 Riley, W. A., 34.
 Rinkle, L. G., 36.
 Ripley, G. E., 8.
 Ritchie, W. S., 36.
 Ritzman, E. G., 40.
 Rix, C. N., 31.
 Roach, G. M., 25.
 Roadhouse, C. L., 9.
 Robb, B. B., 44.
 Robbins, F. E., 19.
 Robbins, H. E., 30.
 Robbins, W. W., 10.
 Robert, J. C., 35.
 Robert, S. A., 57.
 Roberts, D., 65.
 Roberts, E., 17.
 Roberts, E. A., 61.
 Roberts, G., 25.
 Roberts, G. A., 46.
 Roberts, H. F., 24.
 Roberts, I. P., 44.
 Roberts, O. S., 19.
 Roberts, R. H., 65.
 Roberts, W. C., 9.
 Robertson, A. K., 46.
 Robertson, L. S., 19.
 Robey, O. E., 31.
 Robinson, C. M., 17.
 Robinson, C. S., 31.
 Robinson, E., 10.
 Robinson, F. C., 13.
 Robinson, J. L., 66.
 Robinson, L. E., 52.
 Robinson, M., 44.
 Robinson, M. E., 36.
 Robinson, R. H., 52.
 Robison, W. L., 50.
 Robotka, F., 34.
 Rock, J. F. C., 14.
 Rockwood, H., 34.
 Roderick, L. M., 47.
 Rodes, W., 25.
 Roe, H. B., 34.
 Roe, M. L., 25.
 Roethe, H. E., 65.
 Rogers, Mrs. F. J., 6.
 Rogers, J. H., 59.
 Rogers, S. S., 9.
 Rokahr, M. A., 39.
 Rolf, A. F., 27.

- Rolfe, A. L., 36.
 Rolfs, F. M., 50.
 Rolfs, P. H., 12.
 Romberg, A., 14.
 Ronzone, E., 34.
 Rood, H. P., 41.
 Roop, J. H., 19.
 Root, A. D., 36.
 Root, R. R., 17.
 Rosa, J. T., jr., 36.
 Rose, D. H., 37.
 Rose, F., 44.
 Rose, M., 19.
 Rose, R. C. (Md.), 28.
 Rose, R. C. (P. R.), 54.
 Roseboom, B. B., jr., 31.
 Rosen, H. R., 19.
 Rosenkrans, D. B., 55.
 Rosewall, O. W., 27.
 Ross, B. B., 5.
 Ross, H. A., 17.
 Ross, H. E., 44.
 Ross, P. H., 36.
 Rost, C. O., 34.
 Roth, E. G., 34.
 Rouse, T. A., 55.
 Roush, A. J., 65.
 Rowan, L. J., 35.
 Rowe, B. M., 38.
 Rowe, N. F., 19.
 Rowell, J. L., 61.
 Royce, C. H., 44.
 Royce, R. P., 9.
 Rubinow, S. G., 46.
 Rucker, E. H., 21.
 Rudd, W. N., 57.
 Rudnick, A. W., 21.
 Rudnick, R. A., 21.
 Rudolfs, W., 17.
 Ruehe, H. A., 17.
 Ruehle, G. L. A., 45.
 Ruffner, R. H., 28.
 Ruggles, A. G., 34.
 Rulison, H. K., 17.
 Rummell, L. L., 50.
 Rumsey, W. E., 64.
 Runnalls, W. J., 39.
 Rusk, H. P., 17.
 Russell, A. R., 46.
 Russell, F. L., 27.
 Russell, G. P., 26.
 Russell, H. L., 3, 64.
 Russell, M., 21.
 Ruth, W. A., 17.
 Rutland, J. R., 5.
 Ruzek, C. V., 52.
 Ruzicka, C. H., 47.
 Ruzicka, L. A., 41.
 Sachs, W. H., 17.
 Sackett, W. G., 10.
 Sahr, C. A., 14.
 St. John, J. L., 17.
 Salmon, S. C., 24.
 Salt, C. F., 21.
 Salter, R. M., 64.
 Sameth, E., 39.
 Sammis, J. L., 65.
 Sampson, H. C., 49.
 Sams, C. L., 46.
 Sanborn, C. E., 50.
 Sanborn, M. L., 40.
 Sanders, H. K., 8.
 Sanders, L. R., 21.
 Sanders, P. H., 35.
 Sanders, W. H., 24.
 Sanderson, T., 47.
 Sandhouse, H. A., 8.
 Sandsten, E. P., 10.
 Sandy, T. O., 61.
 Sanford, F. H., 31.
 Sargent, C. G., 10.
 Sarle, C. F., 64.
 Saunders, W. D., 61.
 Sauv  , E. C., 65.
 Savage, E. S., 44.
 Sawyer, L., 8.
 Saxer, A. H., 60.
 Sayles, M., 30.
 Schaeffer, A. A., 57.
 Schafer, E. G., 63.
 Schaffner, J. H., 49.
 Schalk, A. F., 47.
 Scherer, N. W., 49.
 Scherffus, C. H., 64.
 Schermerhorn, L. G., 41.
 Scherrer, J. B., 53.
 Schindler, L. M., 65.
 Schlundt, H., 36.
 Schmidt, E. W., 53.
 Schmidt, H., 59.
 Schmidt, R., 9.
 Schmit, C. L., 65.
 Schmitz, N., 53.
 Schneck, H. W., 44.
 Schneider, L. A., 52.
 Schnemayer, S., 24.
 Schoene, W. J., 61.
 Schoenfeld, W. A., 57.
 Schollenberger, C. J., 50.
 Schoppe, W. F., 38.
 Schoth, H. A., 52.
 Schrack, C. V., 15.
 Schramm, J. R., 44.
 Schuer, H. W., 49.
 Schulz, J. A., 50.
 Schumaker, D., 63.
 Schurman, J. G., 42.
 Schuster, G. L., 49.
 Schwab, J. W., 19.
 Schwartz, L. H., 19.
 Schweickard, P., 34.
 Scoates, D., 35.
 Scoles, D. L., 21.
 Scott, C. H., 25.
 Scott, D. M., 61.
 Scott, J. M., 12.
 Scott, J. P., 24.
 Scott, J. W., 66.
 Scott, M. B., 6.
 Scott, R. C., 27.
 Scott, V. E., 39.
 Scott, W. J., 10.
 Scott, W. K., 46.
 Scott, W. R. M., 19.
 Scoville, G. P., 44.
 Scriber, R. G., 8.
 Scudder, H. D., 52.
 Scull, R. S., 30.
 Scullen, H. A., 21.
 Seal, J. L., 55.
 Seacock, W. E., 21.
 Seals, H. W., 6.
 Searles, H. R., 34.
 Sears, F. C., 30.
 Sears, G. W., 39.
 Sears, M., 39.
 Sears, O. H., 19.
 Sears, P. B., 49.
 Seaton, L. F., 39.
 Secrest, E., 50.
 Secrest, M., 34.
 Seeley, D. A., 31.
 Seeley, J., 52.
 Selbert, Mrs. L., 36.
 Selby, A. D., 50.
 Sellers, O. H., 5.
 Selvig, C. G., 34.
 Semmes, D. R., 59.
 Senters, G. W., 57.
 Sequist, M., 24.
 Serex, P., jr., 30.
 Setchell, W. A., 9.
 Seulke, K. J., 44.
 Severance, G., 62.
 Severin, H. C., 56.
 Severin, H. P., 9.
 Severin, J. E., 13.
 Severson, B. O., 53.
 Sewall, H. W., 34.
 Sewell, M. C., 24.
 Sexauer, D., 50.
 Seymour, H. C., 52.
 Seymour, R. J., 49.
 Shanklin, F. M., 19.
 Shaper, B. W., 30.
 Shapirovalov, M., 28.
 Sharp, L. T., 9.
 Sharp, L. W., 44.
 Shattuck, C. H., 9.
 Shaw, C. F., 9.
 Shaw, J. K., 30.
 Shaw, R. S., 30.
 Shaw, S. B., 28.
 Shaw, W. G., 57.
 Shaw, W. T., 63.
 Shawl, R. I., 17.
 Shearer, P. S., 21.
 Shedd, C. K., 21.
 Shedd, O. M., 25.
 Sheehan, B. F., 52.
 Sheets, E. W., 64.
 Sheets, O., 24.
 Shepard, C. E., 11.
 Shepperd, A., 47.
 Shepperd, J. H., 47.
 Shepperd, J. L., 34.
 Sherbakoff, C. D., 12.
 Sheridan, M. E., 11.
 Sherman, F., 46.
 Sherwin, M. E., 46.

- Sherwood, F. B., 44.
 Sherwood, F. F., 21.
 Sherwood, R. C., 56.
 Sherwood, R. M., 24.
 Shields, R. L., 55.
 Shive, J. W., 41.
 Shiver, H. E., 55.
 Shoemaker, J. N., 49.
 Shotwell, E. B., 50.
 Shoup, G. R., 63.
 Shoup, Mrs. G. R., 63.
 Sides, J. E., 35.
 Siegel, M., 41.
 Sievers, F. J., 63.
 Sill, H. F., 37.
 Silva, R. C., 54.
 Silvey, O. W., 59.
 Simmons, G. E., 28.
 Simmons, W. H., 25.
 Simms, B. T., 52.
 Simms, J. A., 11.
 Simpson, C. A., 59.
 Simpson, S. T., 37.
 Sinclair, W., 28.
 Sinnott, E. W., 11.
 Sirrinc, F. A., 45.
 Sisson, S., 49.
 Sjogren, O. W., 39.
 Skeeler, F. J., 59.
 Skelton, G. V., 52.
 Skinner, A., 24.
 Skinner, J. H. (Ark.), 8.
 Skinner, J. H. (Ind.), 18.
 Skinner, L. M., 49.
 Skinner, L. T., 39.
 Skofield, P. F., 62.
 Slade, D. D., 26.
 Slate, W. L., 11.
 Slater, L. C., 27.
 Slipper, J. A., 19.
 Smead, B. S., 63.
 Smelker, W. W., 28.
 Smiley, E. M., 44.
 Smiley, G. F., 31.
 Smiley, V., 24.
 Smith, A., 9.
 Smith, A. A., 21.
 Smith, A. B., 24.
 Smith, A. C., 34.
 Smith, A. G., 26.
 Smith, A. M., 12.
 Smith, B. H., 44.
 Smith, C. M., 51.
 Smith, C. O., 9.
 Smith, C. P., 28.
 Smith, D. W., 65.
 Smith, E. H., 9.
 Smith, E. V., 31.
 Smith, F. A. C., 30.
 Smith, F. H., (Ga.), 14.
 Smith, F. H., (R. I.), 55.
 Smith, G., 44.
 Smith, G. A., 45.
 Smith, G. C., 11.
 Smith, G. E., 64.
 Smith, G. E. P., 7.
 Smith, G. M., 19.
 Smith, H., 60.
 Smith, H. E., 24.
 Smith, H. J., 35.
 Smith, H. W., 28.
 Smith, J. B., (Mass.), 30.
 Smith, J. B., (Mo.), 37.
 Smith, J. E., 29.
 Smith, J. V., 59.
 Smith, L. B., 61.
 Smith, L. H., 17.
 Smith, M. J., 44.
 Smith, N. B., 19.
 Smith, P. H., 30.
 Smith, R. E., 9.
 Smith, R. L., 59.
 Smith, R. M., 21.
 Smith, R. S., 53.
 Smith, T. O., 40.
 Smith, V. C., 49.
 Smith, W. H., (Ill.), 17.
 Smith, W. H., (Miss.), 34.
 Smith, W. J., 50.
 Smith, W. W., 19.
 Smith, Z. M., 19.
 Smitherman, M. J., 14.
 Smyth, E. G., 54.
 Snider, H. J., 17.
 Snodgrass, M. D., 6.
 Snook, J. H., 49.
 Snow, C. M., 62.
 Snow, G. G., 35.
 Snow, O. L., 31.
 Snyder, J. L., 31.
 Snyder, R. S., 21.
 Synder, W. P. (Nebr.), 39.
 Snyder, W. P. (P. R.), 54.
 Solomon, H., 35.
 Sommer, H. H., 65.
 Sorensen, C. J., 60.
 Soule, A. M., 3, 13.
 Southwick, B. G., 11.
 Spafford, R. R., 39.
 Spalding, M. E., 37.
 Spangler, S. M., 57.
 Sparks, E. E., 52.
 Spaulding, C. A., 31.
 Spaulding, M. H., 38.
 Spears, H. D., 26.
 Speas, W. E., 55.
 Speerstra, R., 8.
 Spence, E. R., 59.
 Spencer, A. P., 12.
 Spencer, H., 46.
 Spencer, J. O., 29.
 Spinks, P. E., 35.
 Spinney, L. B., 21.
 Spitzer, G., 19.
 Spragg, F. A., 31.
 Sprague, M. E., 11.
 Spray, R. S., 53.
 Priestersbach, D. O., 34.
 Spriggs, A. D., 64.
 Spring, S. N., 44.
 Sprott, W. T. P., 59.
 Spuler, A., 63.
 Spurway, C. H., 31.
 Stack, J. W., 31.
 Stafford, T. H., 46.
 Stafseth, H. J., 32.
 Stahl, J. L., 63.
 Stakman, E. C., 34.
 Staley, F. M., 56.
 Stanford, H. R., 17.
 Stange, C. H., 22.
 Stangel, W. L., 59.
 Stanley, L., 37.
 Stanton, A. C., 28.
 Stanton, E. W., 22.
 Staples, C. H., 27.
 Starcher, G. C., 5.
 Starin, W. A., 49.
 Starks, D. A., 13.
 Starr, C. G., 19.
 Starr, S. H., 13.
 Starring, C. C., 38.
 Starring, G. A., 56.
 Stear, J. R., 50.
 Steenbock, H., 65.
 Steik, K. T., 66.
 Stemmons, W., 51.
 Temple, F. W., 64.
 Stene, A. E., 54.
 Stenius, J. A., 50.
 Stephen, J. H., 63.
 Stephens, D. E., 52.
 Stephens, E. W., 60.
 Stephens, M. L., 62.
 Stephenson, R. S., 19.
 Stevens, A. T., 11.
 Stevens, H. E., 12.
 Stevens, H. G., 19.
 Stevens, J. S., 28.
 Stevens, R. T., 9.
 Stevens, W. S., 24.
 Stevenson, J. A., 54.
 Stevenson, W. H., 22.
 Stewart, E. D., 47.
 Stewart, F. C., 45.
 Stewart, G., 60.
 Stewart, G. R., 9.
 Stewart, H. W., 65.
 Stewart, J. P., 53.
 Stewart, J. T., 34.
 Stewart, O. J., 40.
 Stewart, O. M., 37.
 Stewart, R., 17.
 Stewart, R. L., 42.
 Stewart, V. B., 44.
 Stewart, W. F., 49.
 Stickle, M. V., 62.
 Stiles, C. F., 26.
 Stinson, J. T., 37.
 Stivers, E. D., 56.
 Stoa, T. E., 47.
 Stockdale, C. E., 64.
 Stocking, W. A., jr., 44.
 Stoddard, E. F., 28.
 Stoddard, E. M., 11.
 Stoddard, C. W., 53.
 Stoll, F., 32.
 Stoltenberg, F. C., 56.
 Stolz, R. B., 49.
 Stone, A. L., 65.
 Stone, C. W., 40.

- Stone, J. L., 44.
 Stone, T. C., 49.
 Stone, W. A., 59.
 Stone, W. C., 45.
 Stone, W. E., 18.
 Stone, Wm. E., 19.
 Stone, W. R., 41.
 Stonecifer, B. P., 22.
 Stookey, E. B., 63.
 Storm, A. V., 3, 34.
 Storms, L. B., 22.
 Stouder, K. W., 22.
 Stout, S. R., 8.
 Stover, W. G., 49.
 Strahan, J. L., 44.
 Strang, L., 65.
 Stratton, J. J., 63.
 Street, J. P., 11.
 Strickland, V. L., 24.
 Strong, R. K., 52.
 Stubbs, C. D., 8.
 Stuckey, H. P., 14.
 Sturdevant, J. F., 61.
 Suarez, E., 6.
 Sullivan, J. E., 28.
 Sullivan, K. C., 37.
 Summers, H. E., 22.
 Sumner, W. A., 65.
 Supplee, G. C., 44.
 Surface, F. M., 28.
 Sutherland, M. E., 63.
 Sutherland, S. A., 17.
 Suttle, A. D., 59.
 Sutton, F. J., 46.
 Sutton, J. A., 50.
 Sutton, L. F., 64.
 Suydam, V. A., 40.
 Swaim, J. E., 51.
 Swain, A. F., 9.
 Swanson, C. O., 24.
 Swartwout, A. M., 37.
 Sweeney, M. P., 45.
 Sweeny, M. E., 3, 26.
 Sweet, M. B., 15.
 Sweet, W. L., 9.
 Swenk, M. H., 39.
 Swenson, R., 37.
 Swenson, S. J., 63.
 Swett, W. W., 37.
 Swezey, O. H., 15.
 Swift, C., 56.
 Swingle, D. B., 38.
 Swire, R. P., 27.
 Swope, W. D., 53.
 Sykes, G. F., 52.
 Sylvester, W. W., 19.
 Symons, T. B., 28.
 Taber, R. F., 40.
 Taff, P. C., 22.
 Taft, L. R., 32.
 Taggart, J. L., 50.
 Taggart, W. G., 27.
 Tague, E. L., 24.
 Tailby, G. W., jr., 44.
 Talbert, T. J., 37.
 Talbot, N. A., 51.
 Talcott, N. E. B., 61.
 Taliaferro, W. T. L., 28.
 Tanner, H. T., 35.
 Tannreuther, G. W., 37.
 Tanquary, M. C., 24.
 Tapke, V. F., 44.
 Tapley, C. R., 11.
 Tarbox, F. G., jr., 55.
 Tarr, W. A., 37.
 Tartar, H. V., 52.
 Taubenhause, J. J., 59.
 Tavernetti, T., 9.
 Taylor, A. D., 49.
 Taylor, A. E., 50.
 Taylor, B. E., 47.
 Taylor, E. J., 62.
 Taylor, E. P., 7.
 Taylor, F. W., 40.
 Taylor, H. C., 66.
 Taylor, H. R., 52.
 Taylor, J. C., 38.
 Taylor, J. E., 60.
 Taylor, L. C., 6.
 Taylor, M. C., 27.
 Taylor, O. M., 45.
 Taylor, R. H., 9.
 Taylor, R. M., 32.
 Taylor, W. A., 3.
 Teeter, T. A. H., 52.
 Temple, C. E., 28.
 Temple, J. C., 14.
 Temple, R., 8.
 Templeton, G. S., 5.
 Terrell, D. V., 26.
 Terrell, I. M., 59.
 Terrell, W. G., 26.
 Terrill, B. M., 61.
 Test, L. A., 22.
 Thach, C. C., 5.
 Thacker, A. E., 5.
 Thatcher, L. E., 49.
 Thatcher, R. W., 3, 32.
 Thayer, C. L., 44.
 Thayer, P., 50.
 Thissell, H. L., 42.
 Thomas, De R., 7.
 Thomas, E. E., 9.
 Thomas, E. K., 55.
 Thomas, F. L., 5.
 Thomas, H. E., 54.
 Thomas, J. C., 60.
 Thomas, J. L., 59.
 Thomas, L., 47.
 Thomas, L. F., 37.
 Thomas, L. P., 59.
 Thomas, L. S., 5.
 Thomas, R. C., 50.
 Thomas, R. H., 14.
 Thomas, R. S., 19.
 Thomas, W., 53.
 Thomas, W. A., 55.
 Thomas, W. D., 14.
 Thompson, A. L., 44.
 Thompson, B. E., 32.
 Thompson, B. H., 39.
 Thompson, B. L., 56.
 Thompson, C. A., 42.
 Thompson, C. H., 30.
 Thompson, C. P., 24.
 Thompson, E. J., 47.
 Thompson, F., 12.
 Thompson, G. E., 24.
 Thompson, H. C., 30.
 Thompson, J. B., 12.
 Thompson, J. I., 9.
 Thompson, M. J., 34.
 Thompson, O. A., 47.
 Thompson, R. B., 42.
 Thompson, S. H., 22.
 Thompson, W. C., 41.
 Thompson, W. O., 3, 48.
 Thomson, A. S., 30.
 Thomson, C. R., 37.
 Thornber, J. J., 7.
 Thornber, W. S., 62.
 Thornburg, M. G., 22.
 Thorne, C. E., 3, 49.
 Thorne, L. E., 17.
 Thornton, S. F., 19.
 Thrash, C. L., 49.
 Throckmorton, R. I., 24.
 Thurber, E. C., 24.
 Thurston, H. W., jr., 39.
 Thurston, R. S., 15.
 Thysell, J., 47.
 Tiebout, G. L., 27.
 Timberlake, P. H., 15.
 Timmons, C. M., 50.
 Tisdale, H. B., 5.
 Titlow, C. R., 3, 63.
 Tittsworth, B. E., 40.
 Titus, R. W., 24.
 Tobey, E. R., 28.
 Tobey, G. N., 57.
 Todd, C. C., 63.
 Tolaas, A. G., 34.
 Tomhave, W. H., 53.
 Tomkins, L. C., 53.
 Tompson, H. F., 30.
 Toms, S., 32.
 Tomson, W. E., 38.
 Toole, E. H., 19.
 Torgerson, E. F., 17.
 Torney, J. L., 66.
 Torrance, J. B., 34.
 Torrey, G. S., 11.
 Tottingham, W. E., 66.
 Tower, W. V., 54.
 Towles, R. C., 28.
 Townsley, T. S., 37.
 Transeau, E. N., 49.
 Traum, J., 9.
 Trescott, K. B., 55.
 Tressler, D. K., 52.
 Tretsven, O., 38.
 Trimble, J. M., 61.
 Trimble, R. E., 11.
 Troop, J., 19.

- Trotter, F. B., 63.
 Trowbridge, E. A., 37.
 Trowbridge, P. F., 37.
 Troy, H. C., 44.
 Truax, T. R., 22.
 True, A. C., 1, 3.
 True, G. H., 9.
 True, L. J., 17.
 Truog, E., 66.
 Tubbs, W. G., 61.
 Tucker, D. B., 51.
 Tucker, F. G., 63.
 Tucker, M. L., 49.
 Tucker, R. H., 11.
 Tuckwiller, E. A., 64.
 Tuckwiller, R. H., 64.
 Tufts, W. P., 9.
 Tull, J. W. B., 62.
 Tungeln, G. H. Von, 22.
 Tunison, L., 35.
 Turley, A. M., 52.
 Turlington, J. E., 12.
 Turnbow, G. D., 63.
 Turner, A. A., 13.
 Turner, A. F., 24.
 Turner, C. F., 19.
 Turner, F., 17.
 Turner, J. D., 26.
 Turner, L. G., 57.
 Turner, W. F., 30.
 Tuttle, E. M., 44.
 Tuttle, F. E., 26.
 Tuttle, H. F., 17.
 Tyler, S. F., 29.
 Ullsperger, H. W., 66.
 Umberger, H. J. C., 24.
 Umholtz, A. J., 37.
 Underhill, G. W., 46.
 Updegraff, H., 12.
 Upson, F. W., 39.
 Valle, R. S., 9.
 Valleau, W. D., 34.
 Van Alstine, E., 17.
 Vanatter, P. O., 13.
 Vance, J., 39.
 Van Deman, R., 44.
 Vanderwilt, E. N., 24.
 Van Dyke, E. C., 9.
 Van Es, L., 47.
 Van Hise, C. R., 64.
 Van Horn, S. E., 30.
 Van Hyning, T., 12.
 Van Meter, A. R., 49.
 Van Norman, H. E., 9.
 Van Nuls, C. S., 41.
 Van Pelt, W., 50.
 Van Rensselaer, M., 44.
 Van Scoy, A., 44.
 Vansell, G. H., 26.
 Van Slyke, L. L., 45.
 Van Steenberg, C., 22.
 Van Zile, M. P., 24.
 Vaplon, W. E., 11.
 Vasey, H. E., 11.
 Vass, A. F., 66.
 Vaughan, H. W., 22.
 Vaughan, R. E., 66.
 Vaughn, E. C., 26.
 Vermilye, E., 34.
 Verret, J. A., 15.
 Verwiebe, W. A., 49.
 Vestal, C. M., 24.
 Vickers, H. A., 52.
 Villá, R., 54.
 Vinal, S. C., 30.
 Vincent, C. C., 15.
 Vinson, A. E., 7.
 Vivian, A., 48.
 Vivian, C. A., 6.
 Vogel, I. H., 22.
 von Ende, C. L., 15.
 Von KleinSmid, R. B., 7.
 Von Tungeln, G. H., 22.
 Voorhees, J. F., 57.
 Voorhies, E. C., 9.
 Vorhies, C. T., 7.
 Vose, L. O., 39.
 Wachter, H. M., 50.
 Wade, C. I., 61.
 Waggener, S. M., 6.
 Wahlín, H. B., 37.
 Waid, C. W., 32.
 Wait, C. E., 57.
 Waite, B., 51.
 Waite, R. H., 28.
 Waites, R. L., 13.
 Walden, B. H., 11.
 Waldron, C. B., 47.
 Waldron, J. A., 32.
 Waldron, L. R., 47.
 Waldron, P. M., 37.
 Walker, B. M., 35.
 Walker, D. E., 62.
 Walker, E., 63.
 Walker, G. B., 35.
 Walker, G. G., 49.
 Walker, H. S., 14.
 Walker, L. S., 30.
 Walker, S. S., 27.
 Walkey, F. L., 19.
 Wallace, R. E., 19.
 Waller, A. G., 41.
 Waller, C. H., 59.
 Waller, K. A., 66.
 Waller, O. L., 63.
 Walsh, W. F., 45.
 Walster, H. L., 66.
 Walton, R. C., 53.
 Walton, T. O., 59.
 Walworth, E. H., 17.
 Wann, F. B., 44.
 Ward, F. V., 34.
 Ward, M., 56.
 Ware, A. S., 59.
 Ware, J. O., 46.
 Ware, L. H., 13.
 Wark, A. C., 41.
 Warner, A. J., 44.
 Warner, D. E., 11.
 Warner, H. W., 22.
 Warner, K. F., 39.
 Warner, L. A., 57.
 Warren, D. C., 5.
 Warren, G. F., 44.
 Warsaw, W. W., 44.
 Wascher, F. M. W., 17.
 Washburn, F. L., 34.
 Washburn, R. M., 34.
 Washington, Mrs. B. T., 6.
 Washington, B. T., jr., 6.
 Watkins, D. W., 55.
 Watkins, L. J., 6.
 Watson, C. W. (Ark), 8.
 Watson, C. W. (Nebr.), 39.
 Watson, J. J., 5.
 Watson, J. R., 12.
 Watson, O. M., 57.
 Watson, P. P., 26.
 Watt, J. E., 42.
 Watt, J. T., 5.
 Watts, H. R., 57.
 Watts, R. J., 30.
 Watts, R. L., 52.
 Waugh, F. A., 30.
 Way, A. E., 9.
 Waynick, D. D., 9.
 Weakley, C. E., jr., 64.
 Weaver, E., 34.
 Weaver, F. P., 53.
 Weaver, J. E., 39.
 Weaver, L. A., 37.
 Weaver, O. W., 12.
 Webb, W. S., 26.
 Webber, H. E., 7.
 Webber, H. J., 3, 10.
 Webster, R. L., 22.
 Weeks, C. R., 24.
 Weeks, D. P., jr., 22.
 Weeks, L. F., 28.
 Weeter, H. M., 19.
 Wegner, E. E., 63.
 Welgley, M., 34.
 Weir, W. W. (Cal.), 10.
 Weir, W. W. (Wis.), 66.
 Welch, C. H., 34.
 Welch, E. G., 13.
 Welch, H., 38.
 Weller, M., 34.
 Wellington, C., 30.
 Wellington, J. W., 45.
 Wellington, R., 34.
 Wells, C. F., 64.
 Welton, F. A., 50.
 Wene, E. H., 41.
 Wengel, E., 66.
 Wentling, J. P., 34.
 Wentworth, H., 51.
 Wentz, J. B., 28.
 Wentzel, H. J., 14.
 Werkenthin, F. C., 42.
 Wermelskirchen, L., 59.
 Werner, C., 37.
 Werner, H. O., 47.
 Werner, H. R., 22.
 Werner, P., jr., 37.
 Werthmüller, F. R., 15.
 Wessels, P. H., 55.
 West, F. L., 60.

- West, J. T., 35.
 West, R. B., 60.
 West, R. M., 34.
 Westbrook, E. C., 13.
 Westcott, J. C., 61.
 Westgate, J. M., 14.
 Westling, R. O., 34.
 Weston, J. W., 32.
 Westover, E. L., 52.
 Wheeler, B. I., 8.
 Wheeler, C. S., 48.
 Wheeler, H. C., 17.
 Wheeler, J. T., 13.
 Wheeler, L., 17.
 Wheeler, R., 17.
 Wheeler, R. H., 44.
 Wheeler, W. P., 45.
 Whelan, D. B., 32.
 Whetzel, H. H., 44.
 Whipple, O. B., 38.
 Whiseland, J. W., 17.
 Whitacre, J., 49.
 Whitaker, H. D., 63.
 Whitaker, W. K., 63.
 Whitechurch, J. E., 17.
 Whitcomb, E. S., 66.
 Whitcomb, W. O., 38.
 White, A., 61.
 White, C. H., 28.
 White, C. W., 26.
 White, D. S., 48.
 White, E. A. (Ill.), 17.
 White, E. A. (N. Y.), 44.
 White, E. N., 49.
 White, F. M., 66.
 White, G. C., 11.
 White, G. D., 6.
 White, G. L., 32.
 White, G. R., 5.
 White, H., 60.
 White, H. B., 34.
 White, H. C., 13.
 White, H. J., 28.
 White, J. L., 57.
 White, J. W., 53.
 White, S., 62.
 White, T. H., 28.
 White, W. C. O., 22.
 White, Mrs. W. P., 14.
 White, W. R., 53.
 White, W. T., 6.
 Whiteford, G. H., 11.
 Whitehouse, W. E., 22.
 Whittenton, R. O., 51.
 Whitfield, J. E., 6.
 Whitfield, S. T., 6.
 Whiting, A. L., 17.
 Whiting, R. A., 19.
 Whitmarsh, R. D., 50.
 Whitney, C. B., 61.
 Whitney, C. C., 59.
 Whitney, C. W., 44.
 Whitney, E. M., 11.
 Whitney, M., 3.
 Whitsitt, M. L., 51.
 Whitson, A. R., 66.
 Whitson, L. R., 34.
 Whitten, J. C., 37.
 Wiancko, A. T., 19.
 Wickes, W. M., 59.
 Wickson, E. J., 10.
 Wiegand, K. M., 44.
 Wiggans, C. C., 37.
 Wiggans, R. G., 44.
 Wiggin, G. H., 34.
 Wight, H. M., 52.
 Wilbur, O. M., 28.
 Wilcox, E. M., 39.
 Wilcox, R. H., 17.
 Wilde, E. I., 53.
 Wilder, C. N., 13.
 Wilder, S., 34.
 Wiley, R. C., 24.
 Wilford, E. J., 19.
 Wilkerson, M., 17.
 Wilkins, F. S., 22.
 Wilkins, S. D., 34.
 Wilkinson, J. A., 22.
 Wilkinson, M. R., 56.
 Wilkinson, O. F., 30.
 Wilkinson, R. S., 56.
 Willaman, J. J., 34.
 Willard, C. J., 49.
 Willard, J. T., 24.
 Willey, L. E., 22.
 Williams, C. B., 46.
 Williams, C. G., 50.
 Williams, C. M., 37.
 Williams, E. A., 14.
 Williams, F. X., 15.
 Williams, G. I., 34.
 Williams, J. C., 7.
 Williams, J. M., 56.
 Williams, J. O., 55.
 Williams, L. C., 24.
 Williams, L. F., 46.
 Williams, N. J., 22.
 Williams, R. H., 7.
 Williams, W., 5.
 Williamson, C. M., 46.
 Williamson, H. H., 59.
 Williamson, J. T., 5.
 Williamson, T. J., 56.
 Williamson, W., 34.
 Willis, D. M., 64.
 Willis, L. G., 57.
 Willis, M. A., 15.
 Willis, R. L., 41.
 Willison, F. H., 49.
 Williston, D. A., 6.
 Willoughby, C. L., 12.
 Willson, C. A., 57.
 Wilson, A. D., 32.
 Wilson, A. L., 60.
 Wilson, B. S., 24.
 Wilson, C., 24.
 Wilson, C. B., 15.
 Wilson, C. P., 42.
 Wilson, F. W., 39.
 Wilson, G., 51.
 Wilson, G. M., 22.
 Wilson, H. C., 5.
 Wilson, H. F., 66.
 Wilson, I. D., 53.
 -Wilson, J. A., 50.
 Wilson, J. K., 44.
 Wilson, J. W., 56.
 Wilson, L. V., 34.
 Wilson, M., 11.
 Wilson, M. C., 40.
 Wilson, M. L., 38.
 Wilson, M. M., 39.
 Wilson, M. O., 61.
 Wilson, R. S., 35.
 Wilson, W. M., 44.
 Wiltberger, P. B., 32.
 Wimer, D. C., 53.
 Winchester, H. B., 22.
 Windsor, W., 37.
 Wing, H. H., 44.
 Wing, L. W., jr., 52.
 Wingard, S. A., 61.
 Winkler, C. H., 64.
 Winsor, L. M., 60.
 Winter, O. B., 32.
 Winters, N. E., 59.
 Winters, R. Y., 46.
 Withers, W. A., 46.
 Withrow, J. R., 49.
 Withycombe, R., 52.
 Witwer, P., 22.
 Wobus, W. W., 10.
 Wodsdalek, J. E., 15.
 Wojta, J. F., 66.
 Wolcott, G. E., 28.
 Wolcott, H. B., 26.
 Wolf, F. A., 46.
 Wolf, P. M., 22.
 Wolfe, T. K., 61.
 Wolff, W. H., 40.
 Woll, F. W., 10.
 Wood, A. E., 59.
 Wood, A. T., 59.
 Wood, B. S., 13.
 Wood, C. A., 59.
 Wood, D. C., 37.
 Wood, I. D., 39.
 Wood, M. N., 10.
 Wood, W. H., 59.
 Wood, W. P., 32.
 Wood, W. W., 53.
 Woodbury, C. G., 18.
 Woodcock, E. F., 32.
 Woodham, H. C., 52.
 Woodman, A., 34.
 Woodman, L. E., 28.
 Woods, A. F., 3, 28.
 Woods, C. D., 3, 27.
 Woods, M., 6.
 Woods, W. C., 44.
 Woodward, C. R., 41.
 Woodward, E. G., 63.
 Woodward, K. W., 40.
 Woodworth, C. M., 66.
 Woodworth, C. W., 10.
 Wooley, J. C., 15.
 Woolman, H. M., 63.
 Wooters, J. E., 22.
 Worcester, M. A., 40.
 Work, P., 44.
 Works, G. A., 3, 44.

- Worsham, W. A., jr., 13.
Worthen, E. L., 53.
Wray, J. D., 46.
Wright, A. H., 66.
Wright, L. H., 39.
Wright, M. E., 24.
Wright, R. G., 41.
Wright, R. R., 14.
Wright, T. H., jr., 56.
Wright, W. H., 66.
Wuertz, A. J., 22.
Wuichet, J. W., 49.
Wyant, R. W., 32.
Wyatt, F. A., 17.
Wyllie, C. E., 57.
Wyllie, R., 22.
Yapp, W. W., 17.
Yates, E., 57.
Yaxis, T. G., 26.
Yeager, A. F., 53.
Yerger, H. C., jr., 53.
Yingling, H. C., 59.
Yocum, L. E., 22.
Yoke, J. J., 64.
Young, B. P., 44.
Young, H. B., 44.
Young, H. C., 32.
Young, H. P., 40.
Young, N. B., 13.
Young, W. J., 12.
Youngblood, B., 58.
Zahnley, J. W., 24.
Zappe, M. P., 11.
Zeeuw, R. de, 30.
Zentmire, Z., 22.
Zerban, F. W., 27.
Ziegler, D. W., 24.
Zimm., L. A., 44.
Zimmerman, P. W., 28.
Zinn, J., 28.
Zion, J. R., 10.
Zook, L. L., 39.



